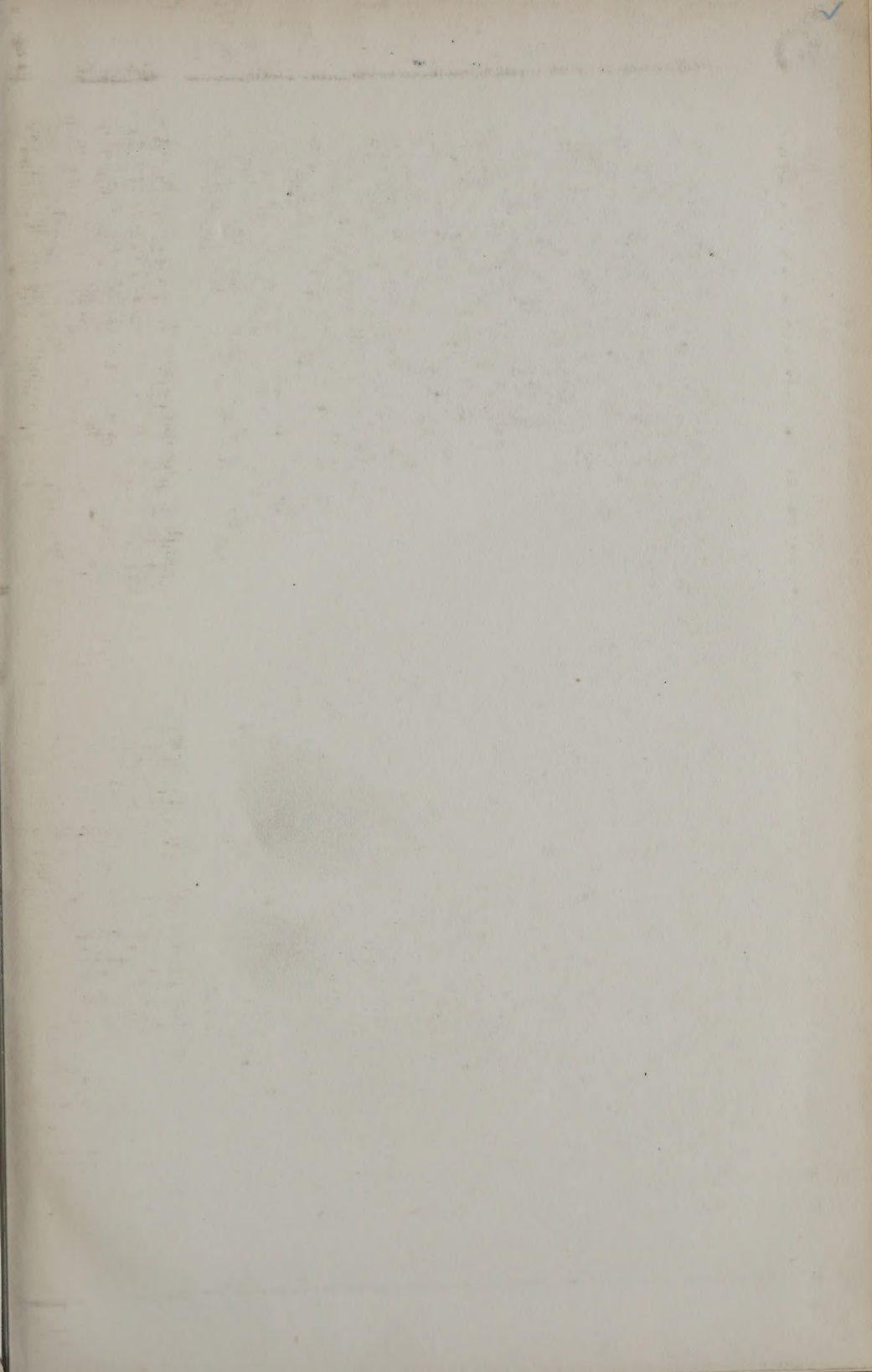
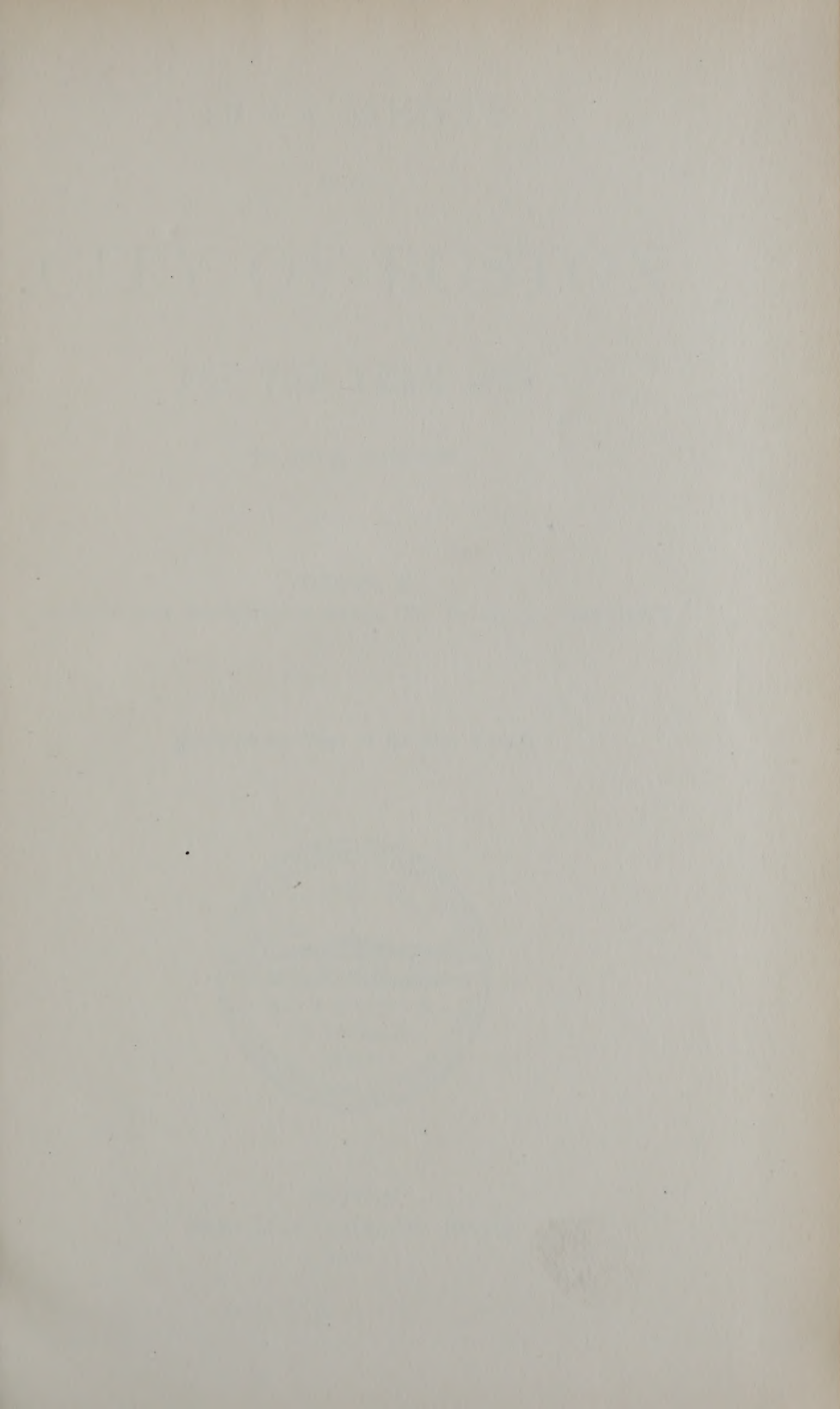


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DOCUMENTS
OF THE
CITY OF BOSTON
FOR THE YEAR 1899

IN FOUR VOLUMES

VOLUME II
CONTAINING DOCUMENTS FROM No. 20 TO 39, INCLUSIVE

Published by Order of the City Council



BOSTON
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1900



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CONTAINING CITY DOCUMENTS FROM No. 20 TO 39,
INCLUSIVE.

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ANNUAL REPORT
OF THE
LAW DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1899.

BOSTON, February 1, 1899.

HON. JOSIAH QUINCY,

Mayor :

SIR,—The officers in charge of the Law Department respectfully submit the report of the department for the year ending January 31, 1899.

The business of the department continues to increase in all its branches. Owing to its varied nature it is impossible to state it in detail, except as to the number and general character of the law-suits pending and disposed of, in which the city is interested or a party to the suit.

August 9, 1898, Mr. Frederick E. Hurd resigned as assistant solicitor ; September 15, 1898, Mr. Philip Nichols, and October 1, 1898, Mr. Thomas A. Mullen, were appointed Assistant Solicitors.

CASES IN COURT.

During the year 305 cases were disposed of and 465 new cases were brought.

The following table shows the number of cases pending at time of last report, and on January 31, 1899, the number

cases disposed of, and the number of new cases brought during the year (not including trustee processes.) The cases are classified with reference to the causes of action.

Cause of Action.	Pending Feb. 1, 1898.	Brought since Jan. 31, 1898.	Disposed of during year.	Pending Jan. 31, 1899.
Assessments of betterments, taxes, etc. .	78	113	40	151
Building law violations,	78	15	16	77
Land damages . . .	227	160	77	310
Personal injuries . . .	433	72	126	379
Miscellaneous	116	105	46	175
	932	465	305	1,092

There are now pending 160 cases in excess of the number pending January 31, 1898.

The following table shows the names of the parties and the causes of action in the suits pending in the various courts at the date of this report.

CASES IN WHICH THE CITY IS PLAINTIFF.

Defendants.	Cause of Action.
Ayer, Caleb R.	Asphalt contract
Badger, William F.	Water rates
Baxter, Horace W.	Building law
F. E. Belden Mica Mining Co.	Tax
Berkman, Abraham	Building law
Berrigan, P.	Filling land
Berry, Benj. P.	Rent
Blake, Royal E.	Support of wife
Bogush, Max	Building law
Boston & Albany R.R.	Grade crossing
Same	do.
Boston & Fitchburg R.R.	do.
Boston & Lowell R.R.	do.
Boston & Maine R.R.	do.
Boston Electric Light Co.	Grade damages
Boston Wharf Co.	do.
Bowers, Leon A.	Building law
Brennan, Arthur	Doing plumbing without license
Brookline Gas Light Co.	Judgment in <i>Crimmins v. City</i>
Same	do.
Bruno, Antonio	Building law
Caldwell, Geo. A.	Aid to pauper
Callahan, Mary A.	Building law
Cambridge, City of	Aid to pauper
Cigrigliano, Gennaro	Building law
Clough, Joseph	Filling land
Codman, Robert	Grade damages
Cohen, Frank	Tax
Cohen, Ida	Building law
Same	do.
Cohen, Jacob	do.
Cohen, Libby	do.
Cold Blast Water Still Co.	Tax
Collins, Michael J.	Overcharge on contract

Defendants.	Cause of Action.
Commonwealth of Massachusetts	Sewer taking
Same	do. apportionment
Same	do. do.
Same	Park taking
Conaty, Mary	Building law
Coon, John J.	Judgment in Blessington <i>vs.</i> City
Cunningham, Thomas	Grade damages
Daly, Hubert	Aid to pauper
Davis, Mary B.	Building law
Di Bocco, Pietro	do.
Dobson, Geo. C.	Judgment in Bradley <i>vs.</i> City
Downing, Catherine	Building law
Drucker, Nathan	do.
Eastern R.R.	Grade crossing
Fleischer, Jacob	Building law
Same	do.
Frye, Morris	do.
Gateman, Joseph	do.
Gilligan, William	Filling land
Giterman, Chas. H.	Building law
Glass, Abraham	do.
Goldberg, Max	do.
Goldstein, Louis	do.
Same	do.
Gooch, Wm. W.	Tax
Grace, James J.	Building law
Habolow, Louis	do.
Hall, Aaron A.	Rent
Harris, Benj.	Building law
Same	do.
Henderson, William H.	do.
Hendrie, Joseph A.	do.
Hicks, Michael J.	Maintaining nuisance
Higgins, R. R.	Building law
Jordan, Henry R.	Rent
Kelly, Richard B.	Judgment in McDermott <i>vs.</i> City
Kingman, Hosea (Met. Sewer Com.)	Trespass
Lamb, Geo.	Filling land
Leventhal, Ide	Building law
Levine, Harris	do.
Lewis, Annie	do.
Lifschitz, Betsey	do.
Louis, Morris	do.
Lynch, Edward	Judgment in Gill <i>vs.</i> City
Mandelsyg, Israel	Building law
Marcus, Simon	do.
Marley, Edward	Rent
Same	do.
Same	Ejectment
Martin, John J.	Maintaining nuisance
McCarthy, Mary	Building law
McCarthy, Patrick	Judgment in McQuarrie <i>vs.</i> City
McCormack, Thomas	Building law
McMorrow, Philip	Rent
McNamara, John	Judgment in Gill <i>vs.</i> City
Michaelson, Annie	Building law
Milton, David	do.
Milton, Mary	do.
Mulrey, J. Richard	Teaming frauds
Mulvey, J. B.	Filling land
Nawn, Owen	Judgment in Arno <i>vs.</i> City

Defendants.	Cause of Action.
New England R.R.	Grade damages
Same	Grade crossing
New York & New England R.R.	do.
Same	do.
O'Connor, Dan'l	Old cans
O'Flahaven, Mary	Maintaining nuisance
Old Colony R.R.	Grade crossings
Same	do.
Pastene, Joseph N., Tr.	Judgment in Bradley vs. City
Perkins, Seth	Water rates
Phillips, Thomas F.	Building law
Pinansky, Simon	do.
Same	do.
Same	do.
Quinn, John	do.
Quinn, Michael J.	do.
Rathowsky, Ida	Taxes
Reid, John	Building law
Rogovin, Barnet	do.
Rosenkranz, Isadore	do.
Ruben, Henry	do.
Rubinovitz, Jacob	do.
Sandrovitch, Jacob	do.
Sargent, Sanford	Tax
Scannell, John	do.
Schwartz, Max	Building law
Same	do.
Same	do.
Silberstein, Israel	do.
Slakin, Henry A.	do.
Slutzki, Aaron	Tax
Smith, Nellie A.	Building law
Smith, Thomas	do.
Sternfield, Louis	do.
Steuer, Bernard	do.
Stevens, Thomas	Ashes
Stevenson, James	Abating nuisance
Sullivan, Thomas	Building law
Thomas, David W.	do.
Twigg, Thomas	do.
Way, Charles G.	do.
Weinbaum, Sophia	do.
Whipple, J. Reed,	Tax
White, Fanny J.	Building law
Whiting, Sidney E.	do.
Williams, Henry B.	do.
Williamson, R. W.	do.
Winthrop Steamboat Co.	Rent
Wolfson, Joseph	Tax
Wood, William H.	Building law
Wyman, Isaac C.	Taking down building

CASES IN WHICH THE CITY IS DEFENDANT.

Plaintiffs.	Cause of Action.
Abbott, Leander B.	Sewer assessment
Adami, Conrad	Grading Washington street
Adams, Adelaide F.	Injury in street
Adams, John Q.	For occupancy of tenement
Adams, Sarah E.	Columbia road taking
Adsit, Willard J.	Injury in street

[illegible]

Plaintiffs.	Cause of Action.
Bowditch, Charles P.	Extending Huntington avenue
Same	Discontinuing South street
Same	Sewer-tax
Brackett, George A.	Columbia road taking
Brackett, Henry F.	do.
Brackett, Jennie	Brighton avenue betterment
Bradford, Gamaliel	Columbia road taking
Bradbury, Annie E.	do.
Bradlee, John T.	Injury in street
Bragg, Grace E.	Infringement of patent
Bragg Mfg Co.	Injury in street
Brainard, Elizabeth W.	do.
Bredemeyer, Amanda	do.
Brennan, Mary J.	Sewer-taxes
Brewster, Frank	Infringement of patent
Brickill, Wm. A.	Brighton avenue betterment
Brighton Ave. Baptist Soc.	Sewer-taking
Brooks, Marietta P.	do.
Same	Park-taking
Brooks, James I.	To prevent building tunnel to E. B.
Brown, Adeline E.	Laying out Commonwealth avenue
Brown, Causten	Park betterment, West Roxbury
Brown, Ebenezer	Brighton avenue betterment
Brown, Edwin K.	Injury in street
Brown, Hattie E.	Injury at ferry
Brown, Hester A.	Injury by explosion
Brown, James F.	Extending Columbus avenue
Bryant, George J.	Injury in street
Bryer, Susan C.	do.
Buffum, Charles T.	Columbia road taking
Burke, Mary A.	do.
Burke, Wm. E.	Water-supply taking
Same	do.
Burnett, Harry	do.
Same	do.
Same	do.
Burnett, Josephine	do.
Burnett, Robert M.	do.
Burnham, Isabel G.	Park-taking
Burnham, John A.	Widening Centre street
Burrage, Chas. H.	Laying out Batavia street
Same	Betterment, Batavia street
Bush, Norah	Injury in street
Busiel, James	do.
Butcher's Slaughtering & Melting Association	Sewer assessment
Same	do.
Byrnes, Margaret	Injury in street
Cain, Florence M.	Sewer-taking
Same	do.
Cain, Thomas F.	Park betterment, West Roxbury
Callahan, Mary A.	Injury in street
Campbell, Catherine	do.
Cannon, Thomas	do.
Capabianco, Angelo	Taking for school-house
Carle, George	Injury in street
Carmelite Convent	Taxes
Same	do.
Carr, John	Work for contractor
Carroll, Ellen	Injury in street
Casey, Ann	do.

Plaintiffs.	Cause of Action.
Casey, Ann	Injury in street
Cassidy, James	Nuisance by sewer
Cassidy, John E.	Sewer-taking
Castiglioni, Rose	Injury in street
Cavanagh, John	Sewer-taking
Caveagnina, Candida	Injury in street
Chamberlin, Calvin A.	Water-supply taking
Chelsea, City	Grade crossing
Childs, Horace R.	Injury in street
Chirurg, Dora	do.
Choate, Charles F.	Water-supply taking
Chubb, William B.	Brighton avenue betterment
Churchill, Joseph R.	Sewer-taking
Clark, Albe C.	Columbia road taking
Clark, Barnabas	Work on dam
Clark, Etta	Injury in street
Clark, Johannah L.	Relocating Weld street
Clark, Louis V.	Injury in street
Clark, Mary A.	Park betterment
Same	do.
Clark, Willett M.	Injury in street
Clark, William R.	Columbia road taking
Clarke, Caroline H.	Relocating Longwood avenue
Clifford, Guy A.	Laying out Folsom street
Clifford, Jeremiah F.	Injury in street
Clough, George A.	Architect's commissions
Cobb, William H.	Pay as fireman
Codman, Charles R.	Sewer tax
Codman, Edmund D.	do.
Codman, Robert	do.
Same	do.
Same	do.
Same	do.
Same	do.
Same	do.
Cole, Mollie K.	Taking for South Station
Cole, Oliver, Administrator	Restrictions on building
Coleman, John J.	Drowning, Castle Island
Collins, Lydia A.	Taking for playground
Collins, Michael J.	Taking for water supply
Commonwealth of Massachusetts	Balance on contract
Same	Aid to pauper
Same	Taking for South Station
Same	do.
Connolly, Ann T.	Nuisance by sewer
Connolly, Bartholomew	do.
Connolly, William	Work for contractor
• Connor, Julia	Injury in street
Connor, William	do.
Connors, Bridget	do.
Conroy, Daniel	do.
Coolidge, Julia	Sewer tax
Cook, Ellen M.	Widening Boston street
Cook, William P.	Assault on ferry
Copp, Mary	Injury in street
Cordaville Woollen Mills	Water-supply taking
Corkery, Maria	Injury in street
Costello, James J.	Sewer-taking
Coté, Louis P.	Injury by runaway horse
Cotting, Charles U.	Widening Huntington avenue
Same	Taking for subway
Cox, Emily D.	Widening Blue Hill avenue

Plaintiffs.	Cause of Action.
Cox, Hannah	Widening Blue Hill avenue
Coxeter, Abby M. S.	Injury in street
Coyle, Jennie	do.
Cram, Mary J.	do.
Cranitch, Catherine	do.
Crocker, Frank W.	Brighton avenue betterment
Crockett, David S.	Work for contractor
Crosby, John F.	Injury in street
Crowther, Harold	do.
Cullen, Bridget	Sewer-taking
Cunniff, Michael M.	Damage to dock
Cunningham, Arthur B.	Injury by explosion
Cunningham, Mary J.	Injury in street
Curran, John	do.
Curtis, Chas. P.	Sewer tax
Same	do.
Curtis, Edwin U.	do.
Cushing, Geo. S.	Park-taking, Dorchester
Cutter, Wm. H.	Brighton avenue betterment
Dacey, Bartholomew	Injury by city team
Dahl, Catherine	Extending Columbus avenue
Daly, Daniel	Injury in street
D'Amico, Antonio	do.
D'Amico, Congeta	do.
Same	do.
D'Amico, Pasquali	do.
Damon, Ann F.	Sewer tax
Dana, Chas. B.	Grading Brookline avenue
Same	do.
Davis, Lilian E.	Park betterment
Davis, Sadie E.	Grading Saratoga street
Day, James M.	Pay as policeman
Day, Samuel R.	Water-supply taking
Dealey, Eugene	Injury in street
Decker, Fred	do.
Deeley, Annie G. Adm'x	Injury by explosion
Delaney, Annie J.	Injury in street
Demmon, Daniel L.	Sewer tax
Devine, John	Park betterments, W. Roxbury
Devine, Mary	Injury on ferry
Devine, Sarah J.	Injury in street
DeWire, William	do.
Dexter, Gordon	Flooding land
Same	Brighton avenue betterment
Same	Sewer-taking
Dexter, William S.	Extending Columbus avenue
Di Angelis, Paolantonio	Work for contractor
Dickman, Diana	Water-supply taking
Dillon, Ann	Columbia road taking
Dillon, James	do.
Dolan, John	Injury to wife in street
Dolan, Mary	Injury in street
Dolan, Michael	do.
Donahue, Margaret	Injury by explosion
Donnelly, Michael	Injury in subway
Donovan, Michael J.	Work on school-house
Doolin, John	Columbia road taking
Dorr, Mary H.	Water-supply taking
Dougherty, Norah	Injury in street
Dowd, Bridget, Adm'x	Injury in trench
Downes, Fred O.	Columbia road taking

Plaintiffs.	Cause of Action.
Downey, Ellen F.	Sewer-taking.
Downing, Catherine E.	School-house taking
Doyle, Lizzie	Injury in street
Doyle, Thomas	Filling land
Drake, Herman	Injury in street
Drewsen, John	do.
Drinan, Ellen	do.
Driscoll, Bridget	do.
Driscoll, Catherine	do.
Drislane, Margaret	do.
Duffy, Lilian	Injury at Castle Island
Dunbar, Henry C.	Injury in street
Dunn, Lucy J.	do.
Earl, Marie B.	Sewer tax
Egan, Patrick	Injury by derrick
Elliott, Margaret J.	
Elliott, Wm. E.	Columbia road taking
Elonsky, Rosa A.	Injury in street
Esslinger, Herman	Extending Cornell street
Estes, Frank W.	Pay as policeman
Fagan, Charles H.	Columbia road taking
Fagin, James K.	Injury in street
Fairbanks, Benj. N.	Water-supply taking
Fairbanks, Chas. A.	do.
Fairfield, Geo. W.	Brighton avenue betterment
Fallon, John B.	do.
Fallon, Michael	Work for contractor
Farr, Sarah M.	Injury in street
Fay, Delia A. Adm'x	Injury in trench
Fay, Elizabeth	Water-supply taking
Fellows, Deborah F.	Injury in street
Fernald, Chas. A.	Pay as policeman
Field, Catherine	School-house taking
Fifty Associates	Subway taking
Same	do.
Finneran, Catherine	Injury in street
Fisher, Geo. C.	Water-supply taking
Fiske, Benj. M.	Sewer-taking
Fitch, Edwin O.	Columbia road taking
Same	do.
Fitch, John B.	Water-supply taking
Fitzgerald, Margaret E.	
Fitzgerald, Mary E.	Injury in street
Fitzpatrick, Daniel J.	do.
Flaherty, Honora	Injury at Castle Island
Flanagan, Dennis	Nuisance by sewer
Flint, David B.	Taking for bridge
Flynn, Kate	Injury in street
Foley, Mary J.	do.
Forbush, Electa M.	Trespass
Forest Hills Cemetery, Trs.	Park betterment, West Roxbury
Fowler, Chas. H.	do.
Framingham Water Co.	Water-supply taking
Francis, Margaret	Injury in street
Frank, Annie M.	Injury by explosion
Franklin, Albert B.	Balance on contract
Freeman, Michael J.	Raising grade of street
Same	Extending Columbus avenue
Frost, Albert G.	Harrison avenue betterment
Same	do.
Frost, Franklin M.	do.

Plaintiffs.

Frye, Emily J.
 Fuller, J. Franklin
 Gaddy, Albert
 Gagan, Edward
 Gallagher, Chas. T.
 Gallagher, Owen
 Gallant, Tranquille
 Gannon, Mary E.
 Garvey, Edward P.
 Geiger, Albert
 Same
 Gerrish, Carrie D.
 Gibbs, John
 Same
 Gibson, Albert
 Gibson, Chas. E.
 Gibson, Rosamond W.
 Gill, Mary S.
 Gill, William
 Goff, James M.
 Golden, Rose
 Goldman, Johannah H.
 Goldman, Louis L.
 Goodenough, Henry B.
 Goodnow, Chas. L.
 Goodsell, Penfield B.
 Goodwin, Wm. H.
 Goosby, Wm. H.
 Gorman, Michael
 Gould, Herbert
 Gourham, Barbara
 Grace, James J.
 Same
 Same
 Granato, Antonio
 Green, John A.
 Green, Perry
 Greene, Fred C.
 Griffin, Daniel F.
 Griffin, Willis
 Grogan, Edward
 Gross, Susan M.
 Guild, Samuel E.
 Hackett, Paul
 Haddock, Wm. H.
 Hagerty, Patrick
 Hales, Margaret
 Haley, Ellen
 Haley, Mary F.
 Haley, William
 Ham, Lucy W.
 Hamlin, Chas. S.
 Same
 Hammett, Fred. W.
 Hanley, Ellen
 Harrington, Isabel S.
 Harris, Moses
 Hartley, Ella M.
 Harvard College
 Hastings, Delia
 Hastings, Francis

Cause of Action.

Brighton avenue betterment
 Extending Columbus avenue
 Injury in street
 Taking for bridge
 Columbia road taking
 Injury to wife in street
 Injury in street
 do.
 do.
 Extending Columbus avenue
 Laying out Laconia street
 Widening Centre street
 Water-supply taking
 do.
 Injury in street
 do.
 Sewer tax
 Park betterment, West Roxbury
 Collision in harbor
 Injury in street
 do.
 do.
 do.
 Sewer-taking
 Harrison avenue betterment
 Nuisance by sewer
 Sewer tax
 Injury by explosion
 Injury in trench
 Injury in street
 do.
 Harrison avenue betterment
 do.
 do.
 Injury in street
 Work on hospital
 Injury in street
 Injury to business by grading street
 Injury in street
 Injury by fire truck
 Work for contractor
 Brighton avenue betterment
 Sewer tax
 Injury by fire truck
 Sewer taking
 Nuisance by sewer
 Injury in street
 do.
 Brighton avenue betterment
 Collision in parlor
 Columbia road taking
 Harrison avenue betterment
 do.
 Extending Columbus avenue
 Nuisance by sewer
 Injury in street
 do.
 do.
 Relocating North Harvard street
 Injury in street
 Park betterment, W. R.

Plaintiffs.	Cause of Action.
Hathaway, Nathaniel	Widening Summer street
Hayden, Christina A.	Injury in street
Hayden, Francis W.	Water-supply taking
Hayden, John E. V.	Grading Gold street
Same	Sewer-taking
Hayes, John	Injury in street
Hayes, Mary E. C.	do.
Hayes, Wm. H.	School-house taking
Same	do.
Heard J. Theodore	Taking for bridge
Hemping, Bridget	Injury in street
Hendrie, Joseph A.	Trespass
Same	do.
Hennessy, Mary	Injury in street
Herrick, Thos. W.	Brighton avenue betterment
Herthel, Fred J.	Grading Ruggles street
Herthel, Jacob	do.
Hess, Edna R.	Water-supply taking
Higgins, Addie	Park betterment, West Roxbury
Higgins, Maria	Grading Saratoga street
Hill, Edwin N.	Services for Water Board
Hirsch, Fred'k	Injury in street
Hirsch, Mary	do.
Hobbs, John S., Assignee	Overflow of Stony brook
Hodges, Edwd. C.	Sewer-taking
Hoenemann, Carl T.	Damage by blast
Holland, John	Injury in street to wife
Holland, Maria	do.
Holland, Mary A.	Columbia road taking
Holleran, Mary A.	Nuisance by sewer
Hollis, Adelaide E.	Brighton avenue betterment
Homan, Ellen	Injury in street
Howe, Israel G.	Water-supply taking
Howe, John P.	Park-taking, S. B.
Howe, Louis L.	Injury in street
Hubbard, Mary A.	Brighton avenue betterment
Humphreys, Richard C.	Sewer-taking
Hunt, Ellen L.	Trespass
Hunt, Mary L.	Brighton avenue betterment
Huntington, Louisa D.	Injury in street
Hurley, Elizabeth C.	do.
Hurmans, Lawrence J.	do.
Hutchinson, Peter J.	do.
Ivers, Mary J.	Injury by explosion
Jackson, Geo. M.	Grading Saratoga street
Jenkins, Bessie	Injury in street
Jenkins, Edward J.	do.
Jezze, Giovanni	Work for contractor
Johnson, Chas. L.	Water-supply taking
Johnson, Ellen	Injury in street
Johnson, Frank L.	do.
Johnson, Henrietta M.	Water-supply taking
Johnson, Josephine E.	do.
Johnston, Geo. W.	Sewer-taking
Jones, Mary A.	Injury in street
Jones, Susie	do.
Joyce, Maria A.	do.
Kamp, Mary	do.
Kane, Frances L.	Widening Spring street
Kean, Peter	Labor for contractor
Kean, Thomas	Tax

Plaintiffs.	Cause of Action.
Keefe, Martha H.	Injury in street
Keefe, Wm. H.	do.
Keith, Havelock	do.
Kelleher, Hugh J.	Injury in street to wife
Kelleher, Margaret	Injury in street.
Kelley, Ann	Nuisance by sewer
Kelley, Gilbert	Injury at stone ledge
Kelley, Margaret L.	Nuisance by sewer
Same	Taking for bridge
Kelley, Timothy	Injury in street
Kelly, Charles	do.
Kelly, Cornelius	Labor for contractor
Kelly, Henry N.	Work at Long Island
Kelsey, Albert H.	Subway taking
Kerr, John S.	Cutting off water
Keyes, Wm. H.	Work on school-house
Kilder, Josephine B.	Water-supply taking
Kilroy, Michael	Injury in street
King, Franklin	Park-taking, Dorchester
Same	do.
Same	Columbia road taking
Kingman, Hosea	Met. Sewer-taking, award for
Kinney, Caroline	Injury in street
Kirby, John F.	Taking for bridge
Kirk, Frank W.	Injury in street
Klause, Andrew F.	do.
Knapp, Mary A.	do.
Knight, Clarence H.	Widening Centre street
Kolb, Charles	Grading Beach street
Koplan, Wolf	Injury by explosion
Ladner, Lottie	Injury in street
Lally, Bridget	Nuisance by sewer
Lally, Catherine	Injury in street
Lally, Geo. W.	Nuisance by sewer
Lally, James	Water-supply taking
Landers, Margaret T. v. McDermott	Slander
Landry, Catherine	Injury in street
Lane, Ellen J.	Sewer-taking
Lane, John	Injury by explosion
Lane, Michael	Injury in street
Lang, Allen A.	Grading Parker street
Lang, Sarah F., Guardian	Injury in street
Langanfeld, John	Nuisance by sewer
Lantry, James	do.
Lapworth, Edward W.	Injury in street
Larkin, Joseph	do.
Lavis, Charles,	Injury by city horse
Lawrence, Harriette W.	Sewer tax
Lawrence, John	do.
Leach, Clara C. Austin	Injury in street
Leahy, Wm. P., Adm'r	do.
Lee, Mary F.	do.
Legg, John H.	do.
Lennon, Mary E.	do.
Leonder, Marx	do.
Lewis, Daniel	Injury in street to wife
Lewis, Gertrude E.	Sewer tax
Lewis, Marion H.	Injury in street
Lewis, Susan	do.
Leverone, John E.	Injury by fall of building
Levin, Abraham	Injury in street

Plaintiffs.	Cause of Action.
Locke, Geo. B.	Injury in street
Lockwood, Rhodes	Taking for bridge
Lonergan, Pierce F.	Work on hospital
Long, Thomas	Injury in street
Loring, Augustus P.	Sewer tax
Loring, Sarah H.	Brighton avenue betterment
Loud, Geo. H.	Injury in street
Low, Louisa R.	do.
Low, Wm. A.	Park betterment, Roxbury
Luce, Syrena L.	Injury in street
Lundin, Adolph	Injury by explosion
Lynch, Mary A.	Widening Spring street
Lyons, Bridget	Injury in street
Macdonald, R. Cyrene	do.
Maguire, Jane	do.
Maguire, Mary	do.
Mahoney, Catherine E.	do.
Mahoney, Daniel F.	Water-supply taking
Mahoney, Daniel J.	Injury at ferry
Mahoney, Ellen	Injury in street
Mahrenholz, August	Grading Saratoga street
Malcolm, Geo. F.	Pay as policeman
Maloy, Walter	Injury in street
Mandell, Chas. M.	do.
Mann, Mary A.	Laying out Greenbrier street
Manning, Emma E.	Injury in street
Manning, Kate	do.
Mannix, Ellen M.	do.
Mardone, Louise	School-house taking
Marley, Edward	Repairs on building
Marshall, John	Injury in street
Marshall, Joseph I.	Water-supply taking
Martin, James	Injury by stone crusher
Martin John J.	Taking building by Board of Health
Martin, Mabel H.	Brighton avenue betterment
Martin, Wm. H.	Injury in street
Mason, Thos. E.	do.
Mason, Wm. P.	Extending Columbus avenue
Masters, Hilmon P.	Injury in street
Maynard, Gertrude M.	Brighton avenue betterment
McBride, Hannah J.	Widening Centre street
McCarthy, Eliza	Injury in street
McCarthy, Louis	Nuisance by sewer
McCarthy, Timothy	Injury by explosion
McClutchy, Robert J.	Injury in street
McCool, Mary	do.
McCormack, Thomas	School-house taking
McCue, Thomas	Injury in street
McDevitt, Margaret	do.
McDonald, Henry	Sewer-taking
McDonald, John	Work for contractor
McDonald, Martin	Injury in street
McDonald, Mary	do.
McDowell, Emma J.	Damage to house by water
McDowell, Margaret M., Adm'x	Drowning at Castle Island
McElroy, Henry	Brighton avenue betterment
McGee, Thomas	Injury in subway
McGillen, Francis L.	Sewer-taking
Same	Widening Francis street
Same	Laying out Norway street
McGourty, Myles	Work for contractor

Plaintiffs.	Cause of Action.
McGovern, John	Work for contractor
McHugh, Patrick	do.
McInnis, Mary E.	Injury in street
McIntire, Elizabeth	do.
McKenney, Timothy	Injury by blast
McLaughlin, Elizabeth	Injury in street
McLauthlin, Geo. T.	Park betterment, Roxbury
McMahon, Ellen	Grading Dorchester avenue
McMahon, Margaret	Injury in street
McMullen, Margaret	Grading Ruggles street
McNeil, Annie C.	Injury on school-house steps
McNeil, Neil	Work on hospital
Same vs. T. L. Jenks	do.
Same vs. E. M. Wheelwright	do.
Same	Columbia road taking
McNulty, Edward P.	Injury in street
McPartland, Peter	Work for contractor
McQuaid, John	Injury in street
McShane, John	Sewer-taking
McTiernan, Myles	Work for contractor
Meehan, Patrick	Park betterment, West Roxbury
Mercantile Wharf Co.	Nuisance by sewer
Merrill, Thomas	Injury in street
Metcalf, Albert	Sewer-taking
Metcalf, Theodore Co.	Damage by water
Miller, Augusta	Injury in street
Miller, Frank	do.
Milmore, Eliza	do.
Miskell, Thomas	Park betterment, West Roxbury
Mitchell, Wm. S.	Sewer assessment
Mogan, James	Injury in street
Mohilly, Maggie	do.
Monroe, James A.	Sewer-taking
Moore, Eliza A.	do.
Same	Laying out Falmouth street
Moore, Fred W. Adm'r	Injury by explosion
Moore, John F.	Laying out Norway street
Moran, Mary	Injury in street
Morrison, Mary W.	do.
Morrow, Mary A.	do.
Morse, Albert G.	Columbia road taking
Morse, E. Rollins, Adm'r	Injury by explosion
Morse, James F.	Sewer tax
Moulton, Chas. F.	Services at hospital
Mowry, Oscar B.	Widening Summer street
Moynihan, Dennis	Injury in street
Mulhern, John	do.
Mullin, John	do.
Mullins, Katie	do.
Murch, Annie B.	do.
Murphy, Annie	do.
Murphy, Catherine	do.
Murphy, Elizabeth C.	do.
Murphy, Hannah E.	do.
Murphy, Margaret D.	do.
Murphy, Mary J.	do.
Murphy, Michael H.	do.
Murphy, Morris	do.
Murphy, William	Injury in subway
Same vs. Transit Commissioners	do.
Murray, Eben	Park betterment, West Roxbury

Plaintiffs.	Cause of Action.
Murray, James	Work for contractor
Murray, L. M.	do.
Museum of Fine Arts in Boston	Sewer tax
Myers, Dora	Injury in street
Nally, Elizabeth	do.
Napolitani, Giuseppe	Taking for school-house
Nason, Joanna C.	Grading Lowder street
Same	do.
Nash, Willard G.	To charge city as trustee
Nat'l Construction Co.	Delaying work on Stony-brook
Nawn, Henry P.	Delaying work on sewer
Nay, Mary J.	Injury in street
Neas, John H.	do.
New Eng. Mut'l Life Ins. Co.	Sewer tax
Newhall, Horatio	Water-supply taking
Same	do.
Newman, Harry	Injury in street
Newton, Albro	Trespass
N. Y., N. H. & H. R.R.	Timbering track
Same	Columbia road taking
Nichols, John	Grading La Grange street
Nickerson, A. Eugenia	Laying out Peterboro' street
Nickerson, Amelia F.	Laying out Ipswich street
Nicodemo, Biazzo	Injury in street
Noble, John C.	do.
Noonan, Maurice	Injury in coaling vessel
Norton, Timothy	Work for contractor
Nowland, Kate	Injury in street
Nuremberg, Yetta	do.
O'Brien, Anna	do.
O'Brien, Elizabeth	do.
O'Brien, Ellen	do.
O'Brien, James W.	Laying out Quincy street
Same	do.
O'Brien, Mary, Adm'x	Injury in street
O'Brien, Thomas	do.
Ockershauser, Fred	do.
O'Connell, Dennis F.	Work on pipe line
O'Connor, John	Injury in street, to wife
O'Connor, Margaret	Taking for bridge
O'Connor, Mary	Injury in street
Oelschlager, Anton	Extending Columbus avenue
O'Hara, Thomas	Injury in street
O'Laughlin, Bartholomew	do.
Old Colony R.R.	Grade crossing
Same	do.
Same	Extending Atherton street
Same	Sewer taking
O'Leary, Annie	Injury in street
O'Meara, Stephen	Brighton avenue betterment
O'Neil, Arthur H.	Columbia road taking
Orcutt, Mary E.	Injury in street
O'Riley, Catherine	do.
O'Riordan, Patrick	Taking for bridge
O'Rourke, Patrick	Injury in street
Orr, William	do.
Owens, Daniel	do.
Packard, John D.	Brighton avenue betterment
Page, Laura M.	Columbia road taking
Paolo, Nicolo	Work for contractor
Parker, Annie L.	Injury in street

Plaintiffs.	Cause of Action.
Parker, Margaret M.	Injury in street
Parke, George W.	Widening Blue Hill avenue
Park St. Congregational Soc'y	Sewer tax
Parle, Abraham	Injury at ferry
Patrick, Henry B.	Taking for school-house
Payson, Perley J.	Damage to horse
Paxon, Edw'd M.	Grading Chelsea bridge
Peabody, Francis, jr.	Constructing Boylston st. extension
Same	Sewer tax
Pearlman, Rachel	Injury in street
Pearson, Louler M.	Sewer tax
Peck, Susan A.	Injury by explosion
Pendle, Wallace H.	Discontinuing Columbia street
Perkins, Frances M.	Columbia road taking
Perry, Mary	Injury in street
Peters, Andrew J.	Park betterment, West Roxbury
Same	do.
Peters, Edward D.	Sewer tax
Peterson, John P.	Grading Saratoga street
Pfister, Hannah M.	Injury in street
Phelan, James	do.
Phillips, Ella A.	Injury by explosion
Pierce, Emma F.	Water-supply taking
Pierce, J. Homer	Columbia road taking
Pierpoint, Margaret	Injury in street
Pinciari, Filippo	Work for contractor
Pollard, George E.	Sewer tax
Potter, Julia	Injury in street
Powers, Anna	do.
Powers, Catherine	do.
Powers, Cornelius H.	Account for labor
Powers, James	do.
Pray, John A.	Harrison avenue betterment
Preble, Myrick	Injury in street
Prentiss, Benjamin F.	Water-supply taking
Profit, Elthia	Injury in street
Quimby, Benj. F.	Balance on contract
Quincy Market Cold Storage Co.	To prevent permit to another Co.
Quinn, Catherine, Adm'x	Injury in subway
Rand, Arnold A.	Betterment, Essex street
Same	do.
Same	Betterment, Harrison avenue
Same	do.
Ranney, Ambrose A.	Nuisance by sewer
Ranney, Edward D.	Injury in street
Ratshesky, Israel A.	Columbia road taking
Same	do.
Reardon, Jeremiah	Injury in street
Reardon, John	Work for contractor
Reardon, Mary	Injury in street
Reed, Dan'l W.	Injury by explosion
Regan, Edward	Sewer-taking
Reisert, Anna M.	Nuisance by sewer
Rice, Esther J.	Injury in street
Rice, William B.	Sewer tax
Richards, Anne	do.
Richards, Francis A.	do.
Richardson, Wm. H. Co.	Damage by water
Roakes, Catherine	Injury in street
Robinson, Frank B.	Injury at ferry
Robinson, Herbert	Damage by blasting

Plaintiffs.	Cause of Action.
Roche, John	Work for contractor
Rogers, Olivia M.	Columbia road taking
Ropes, John C.	Sewer tax
Rose, Lilian	Injury by explosion
Rosenthal, Annie	Injury in street
Ross, John	Injury by explosion
Roughan, Michael	Taking for bridge
Same	do.
Same	do.
Rowan, Louisa	Injury in street
Rowe, Amelia B.	Sewer tax
Rowe, Solomon S.	do.
Roy, Alice M.	Injury in street
Royal, Annie	do.
Rush, Mary E.	do.
Russell, Alexander	Columbia road taking
Russell, Thos. H.	Discontinuing Congress square
Ryan, Cornelius	Injury in street to wife
Ryan, John P.	Widening Adams street
Same	Sewer-taking
Ryan, Maria	Injury in street
Ryan, Mary	do.
Sandstedt, Marie J. v. F. G. Hago- pian	Assault at hospital
Sanford, Helen G. H.	Injury in street
Sanford, Martha P.	Widening Blue Hill avenue
Sargent, Chas. H.	Injury by explosion
Sargent, Horace B.	Extending Columbus avenue
Sargent, Thos. W.	Pay as policeman
Saville, Thomas	Work for contractor
Saville, Sarah E. Adm'x	Injury in street
Sawyer, Geo. A.	Columbia road taking
Scanlon, Thomas	Work for contractor
Schroeder, William	Injury in street
Scigliano, Gennaro	Nuisance by sewer
Scott, Andrew C.	Pay as fireman
Scully, John T.	Damage to horse
Seaman, Harry v. Dr. H. L. Burrell	Malpractice
Sears, Joshua M.	Sewer and street watering taxes
Same	do.
Same	do.
Sears, Sarah P.	do.
Seastrand, Olga	Injury in street
Seaver, Edward	Extending Columbus avenue
Seaver, Eliza	do.
Security Safe Deposit Co.	Nuisance by sewer
Shaw, Edward P. Treas.	Aid to pauper
Same	do.
Shea, Geo. J.	Injury in street
Sheehan, Honora	do.
Shepard, Emily E.	Relocating South street
Shepard, Gilbert H.	Sewer tax
Shepard, Harvey N.	do.
Shepard, Otis	Columbia road taking
Shine, Daniel	Injury by explosion
Shock, Maria K.	Injury in street
Shorely, Albert E.	do.
Shuman, Samuel	Extending Columbus avenue
Sibley, Emma M. Adm'x	Injury by explosion
Simoli, Nicolo	Work for contractor
Simonds, James L.	Tax

Plaintiffs.	Cause of Action.
Skrocki, Wladislaw	Injury in subway
Slavin, James	Work for contractor
Sliney, Maria	Injury in street
Smith, Joseph A.	Widening Huntington avenue
Spellman, Michael	Work for contractor
Spencer, Josephine V.	Sewer-taking
Same	Columbia road taking
Same	do.
Same	do.
Spillane, Jeremiah C.	Widening Blue Hill avenue
Stanley, Geo. C.	Injury in street
Stanley, James C.	do.
Stanley, Mary A.	do.
Stanwood, Hannah R.	Columbia road taking
Star Brewing Co.	Sewer-taking
Stark, James H.	do.
Same	do.
Same	do.
Starkweather, Joseph H.	Pay under assignment
St. Clair, Edwin L.	Injury in street
Stearns, Idella E.	do.
Steele, Albert G.	Work for contractor
Stevens, Mary E.	Damage by blast
Stevenson, James	Extending Boylston street
Stewart, Maggie	Injury in street
Stock, Arthur H. v. Dr. Jelly <i>et al.</i>	Imprisonment, etc.
Stoddard, Eugene B.	Injury in street
Stone, Julius	do.
Stone, Mary A.	Park-taking
Stoughton, Town of	Aid to pauper
Stroud, Fanny	Injury in street
Sullivan, Ellen	do.
Sullivan, Florence A.	do.
Sullivan, James	do.
Sullivan, John	Injury in subway
Same	do.
Sullivan, Kate	Injury in street
Sullivan, Mary A.	do.
Sullivan, Mary T.	do.
Sullivan, Michael	Nuisance by sewer
Suter, Hales W.	Grading South street
Swanton, William	Sewer-taking
Sweet, William A.	Taking Church street district
Swift, Lena E.	Injury in street
Swift, Maggie A.	Brighton avenue betterment
Tarpey, Mary	Injury in street
Taverner, Arthur I.	Widening Blue Hill avenue
Taverner, Harry	do.
Taverner, Thomas	do.
Taverner, William	do.
Taylor, Adella C.	Injury in street
Taylor, Albert A.	Sewer assessment
Taylor, Edward E.	do.
Taylor, Jacob M.	do.
Taylor, Jeremiah	Injury in street
Terry, Hattie	do.
Thayer, Charles E.	Tax
Thayer, William H.	Columbia road taking
Thompson, Ruth S.	Subway taking
Tilton, Joseph A.	Injury in street
Timmins, Arthur	Brighton avenue betterment

Plaintiffs.	Cause of Action.
Timmins, Arthur	Laying out Chester street
Tinglof, August	Taking for street
Tirrell, Jesse	Brighton avenue betterment
Tirrell, John E.	Damage to horse
Tobey, Gerard C.	Park taking, Dorchester
Same	Columbia road taking
Tompson, Ruth H.	Extending Ruggles street
Torrey, William M.	Damage to team
Troy, Catherine	Injury in street
Tufts College, Trustees of	Change of investment
Same	do.
Same	do.
Tuttle, Martha A.	Park betterment, Dorchester
Tuttle, Mary	Injury in street
Tuttle, Thomas W.	Park betterment, Dorchester
Twomey, Timothy J.	Injury in street
Upham, Charles J.	Columbia road taking
Upham, Eliza A.	do.
Same	do.
Van Nostrand, William T.	Park taking
Van Voorhis, Henry W.	Taking for bridge
Vaughan, Cedric M.	Injury at ferry
Vose, Charles E.	do.
Wade, Joseph M.	Columbia road taking
Wakeham, William H.	Injury in street
Waldo, Charles S.	Taking for bridge
Wales, Annie M.	Columbia road taking
Wales, Elizabeth A.	do.
Same	do.
Walworth Manufacturing Co.	Relocating Congress street
Ward, Thomas	Injury in street
Warren, Isaac W.	do.
Washburn, Mary A. Adm'x	Drowning at Castle Island
Webster, Wilhelm	Work for contractor
Weed, Otis H.	Sewer assessment
Weir, Mary E.	Injury in street
Welch, Edward J.	do.
Welch, Francis C.	Sewer tax
Same	do.
Welch, Patrick	Columbia road taking
Welch, Willard	Park-taking, Dorchester
Welsh, Patrick F.	Injury in street
Wentworth, Arioeh	Extending Summer street
West End Street Railway Co.	Extending Beacham street
Same	Columbia road taking
Wezansky, Jacob	Extending Cornell street
Whalen, Hannah L.	Injury in street
Wheatland, George	Brighton avenue betterment
Wheelock, Addison P.	Columbia road taking
Wheelwright, Charles C.	Nuisance by sewer
Whelan, William	Work for contractor
Whitecomb, Anna P.	Laying out Gaylord street
Whitecomb, Edwin P.	do.
Same	do.
White, Mrs. Edward T.	Injury in street
White, Francis L.	Work on trench
Whitlock, James N.	Injury in street
Whittemore, John A.	Balance on contract
Whittemore, Maria M.	Laying out Montview street
Whittemore, Willard P.	Sewer taking
Wiggin, Clara E.	Injury in street

Plaintiffs.	Cause of Action.
Wilber, James E.	Injury in street
Wiley, William O.	Taking for bridge
Wilkins, Walter	Brighton avenue betterment
Wilkins, Walter L.	Injury in street
Willard, Francis L.	Taking for playground
Williams, Margaret S.	Brighton avenue betterment
Williams, Moses	Subway taking
Wilson, Geo. A.	Injury in street
Same	Brighton avenue betterment
Winchester, Wm. R.	For part of award for land taken
Wing, Chas. H.	Park betterment, West Roxbury
Wingate, James I.	Brighton avenue betterment
Witherell, John H.	do.
Wittekind, Emma	Injury in street
Wittekind, Louisa	do.
Wolf, Herman	Damage to horse
Wollenweider, Albert	Grading Beach street
Woodman, Lucy A.	Taking for playground
Woodward, James W.	Taking away contract
Woodward, Marion L.	Sewer-taking
Worster, Annie E.	Columbia road taking
Young, Jessie	Damage by water
Ziegler, Alfred	Taking Stony brook
Same	do.
Zirnth, Bertha	Injury in street
Zwicker, Cassia A.	do.

PROPERTY OF THE DEPARTMENT.

The property of the department remains unchanged except by the addition of some twenty-four volumes of law reports and text-books, and two or three atlases of different parts of the city.

OFFICERS OF THE DEPARTMENT:

Andrew J. Bailey, *Corporation Counsel.*

Thomas M. Babson, *City Solicitor.*

ASSISTANTS.

Samuel H. Hudson, *Assistant Solicitor.*

John T. Wheelwright, *Assistant Solicitor.*

Samuel M. Child, *Assistant Solicitor.*

Thomas A. Mullen, *Assistant Solicitor.*

Philip Nichols, *Assistant Solicitor.*

Charles F. Day, *City Conveyancer.*

Roscoe P. Owen, *City Conveyancer.*

Fisher Ames, *Clerk.*

Respectfully submitted,

ANDREW J. BAILEY, *Corporation Counsel.*

THOMAS M. BABSON, *City Solicitor.*



ANNUAL REPORT
OF THE
LIBRARY DEPARTMENT
FOR THE YEAR 1898.

TO HIS HONOR JOSIAH QUINCY,
Mayor of the City of Boston:

The Trustees of the Public Library present the following report of its condition for the year ending January 31, 1899, being the forty-seventh annual report.

They include herewith, as a part of their report, that of the Librarian and its accompanying reports, including that of Mr. Worthington C. Ford, Chief of the Department of Documents and Statistics, together with the report of the Examining Committee. These reports contain details of which the Trustees in this report present only a partial summary.

An exact account of the receipts and expenditures of the Trustees for the past year is found in the reports of the Librarian and of the Auditor, but these statements do not exhibit in a simple form the income and expenditures which may be said strictly to belong to the year.

1898-1899.

The cost of maintaining the Library during the year 1898-1899 was :

Salaries	\$162,690 48	
Books	29,035 04	
Periodicals	5,900 06	
Newspapers	2,146 44	
General maintenance	64,808 02	
		\$264,580 04

Of this amount

The city appropriated	\$246,855 87	
The trust funds yielded	13,674 11	
		\$260,529 98

The balance of the cost \$4,050 06
was obtained from miscellaneous gifts, etc.

This statement does not include balances of preceding years which were subject to charges for outstanding orders for books and similar appropriations incurred prior to the year covered by this report, but attempts to show in general the means at the command of the Trustees during the year for the maintenance of the Library, including the purchase of books.

Two sources of income, viz., the rents of the old Library building and the proceeds of fines and of the sales of the publications of the Library, of which the Library had heretofore received the benefit, were no longer available. By the requirements of the appropriation bill of 1898, sums received from these sources were paid into the City Treasury. In consequence, the means at the disposal of the Trustees for the general purposes of the Library were less by about \$2,000 than in the preceding year, although the general appropriation by the city exceeded that of the preceding year by \$10,000.

The preparation of the publications of the Library involves a cost of over \$4,000 annually, and this expense is paid from the general appropriation. The cost of collecting the fines due the Library amounts to about \$1,500 annually, and this cost is also paid from the general appropriation. It seems just to the Trustees that the proceeds of the sales and of the fines should both be allowed to the Library, or that the expenses incurred by them in these regards should be reimbursed to them and not made a charge upon their general resources.

MAP OF CAMP 442000 WINTER

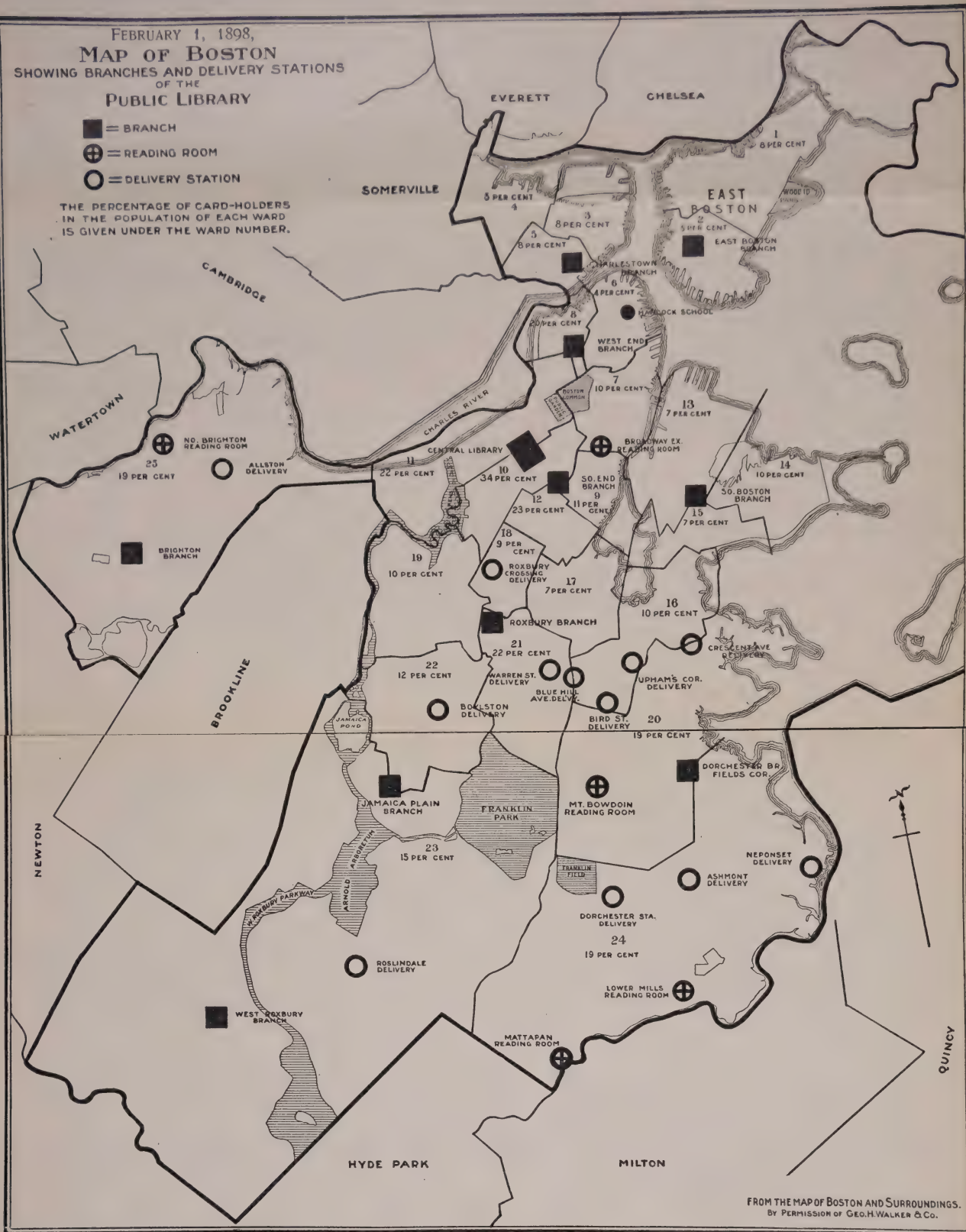
BY INFORMATION RECEIVED FROM THE
FROM THE MAP OF POSITION AND 210000



FEBRUARY 1, 1898,
MAP OF BOSTON
 SHOWING BRANCHES AND DELIVERY STATIONS
 OF THE
PUBLIC LIBRARY

- = BRANCH
- ⊕ = READING ROOM
- = DELIVERY STATION

THE PERCENTAGE OF CARD-HOLDERS
 IN THE POPULATION OF EACH WARD
 IS GIVEN UNDER THE WARD NUMBER.



FROM THE MAP OF BOSTON AND SURROUNDINGS.
 BY PERMISSION OF GEO. H. WALKER & CO.

Area of City, 43 Square Miles.

It has been for some time obvious that it was desirable to make certain alterations and improvements in the Library Building as originally constructed, not so much by way of addition to it as for the purposes of better administration, especially with reference to the more rapid delivery of books, for better accommodation of readers, and for better ventilation and general sanitary arrangements. There were no funds in the possession of the Trustees available for these purposes. Under the authority of an Act of the Legislature passed in the session of 1898 and the subsequent action of the City Council, a special appropriation of \$100,000 was provided. This sum, together with portions of some small balances of the original appropriations for the construction and furnishing of the building, have been expended during the past year for the purposes described. The details of the work are exhibited in the Librarian's Report. It is substantially completed, and has greatly improved the convenience and healthfulness of the Library, both for the public and those employed in it, has added greatly to the efficiency of its administration, and to a degree in excess of the expense incurred.

The use of the Library constantly increases. This increase is shown in various ways. The number of card holders for 1897 was 64,973; for the year 1898 it was 72,005, showing an increase of 7,032, or nearly 11 per cent. The increase of the circulation of books and of visitors and readers, both at the Central Library and the branches, furnishes additional evidence of such increased use.

This increased use involves additional expense of the administration of the Library and such additional expense the Trustees have been able to meet chiefly by diminishing the purchases of books. It is upon this item of expenditure that the pressure of economy immediately falls. Accordingly the increase of the Library in volumes purchased has been considerably less during the past year than in the preceding. In 1897, 33,131 volumes were added to the Library, but in 1898 only 25,470 — a number less by 7,661.

The Trustees find it difficult, with the means at their command, to supply the Library and its branches with the popular publications of the day. It is only from the slender income of the Trust Funds that they can procure the rarer books needed to maintain the general character of the Library as one valuable not merely to supply entertainment, but also as one useful to the mechanic, the student and the scholar. The Library is greatly in need of means to

purchase the rare historical material occasionally offered for sale, and otherwise not easily to be obtained, especially that relating to the history of Boston and of New England, which the Trustees consider it their especial duty to collect.

The general condition of the books in the Library is good, but prudent management calls for the expenditure of a much larger sum than the Trustees have at their command for the rebinding and repair of many volumes. At least \$20,000 could be wisely expended for these purposes and this sum is required by true economy.

Requests are continually presented to the Trustees for the permanent improvement of certain branches, for the establishment of new delivery stations, and for similar expenditures. The means at their command have enabled them to comply with but a small portion of these requests. Four additional public schools and one branch post office have been made deposit stations, and one delivery station has been supplied with a deposit collection. These additions represent the expansion of the Library system during the past year.

With respect to the financial position of the Library the Trustees report that they have kept their expenditures strictly within their means. No expenditure or obligation is incurred beyond the limit of such means, and consequently there is no deficit at the close of the year. It is, of course, obvious that unless these means increase in proportion to the use of the Library and the growth of the city it will be impossible to maintain its present rank and usefulness.

The Trustees have added a new department this year to the Library, that of Documents and Statistics. In June, 1898, the American Statistical Association presented to the Library its valuable collection of books and pamphlets numbering about 5,000 volumes. These, together with the Public Documents and other similar economic and sociological material already in the possession of the Library, constituted a valuable collection which the Trustees were satisfied could be made available for great service to the public. It furnishes the means for investigations tending to the improvement of laws, of social conditions and the expansion of trade. Accordingly, this department was created and Mr. Worthington C. Ford was appointed its Chief. Mr. Ford was formerly Chief of the Bureau of Statistics of the Treasury Department at Washington and brings to the service of the Library the benefit of his large experience. The Trustees ask attention to the reports of the Librarian and of Mr. Ford, which contain an extended description of the value and purposes of the department and an account of what it has thus far accomplished.

There has been presented to the city of Boston and deposited in the Library a copy in marble, made by John Hutchison, R.S.A., of the bust of Sir Walter Scott now placed in Westminster Abbey by the Committee on the Scott Memorial.

Mrs. Robert Louis Stevenson has presented to the Library twenty-four wooden blocks engraved by Mr. Stevenson himself, impressions of which were reproduced in the Bonus Volume of the Edinburgh Edition of his works.

Other gifts of interest and value are enumerated in the Librarian's report. While the Trustees are of the opinion that it is undesirable to make the Library in any sense a museum of curiosities, yet there are many objects of art and literature which find an appropriate place in it, and are both interesting and instructive. Such gifts they welcome.

They again call attention to the great need of permanent endowments for the Library. It is chiefly from such sources that the permanent value of the Library can be secured.

The large inner court of the Library Building possesses great architectural beauty, but it is incomplete, and affords room for much greater additional natural and artistic decoration. The open area offers a field for the display of shrubs and flowers; and sculpture and other works of art would find most appropriate positions. The Trustees hope that some generous giver may recognize here his opportunity.

The Committee appointed by the Trustees to examine the Library during the past year consisted of:

J. Bapst Blake, M.D.
 Hon. Patrick A. Collins.
 E. Winchester Donald, D.D.
 Mr. C. W. Ernst.
 Mr. Alfred Hemenway.
 Mr. John H. Lee.
 Miss E. F. Mason.
 Mr. James J. Roche.
 Mrs. Sarah H. Williamson.

Hon. Henry W. Bragg.
 Rev. Arthur T. Connolly.
 Wm. H. Ensworth, M.D.
 Miss Gretchen Field.
 Mr. Thomas Hills.
 Mr. A. Lawrence Lowell.
 Mrs. Elizabeth F. Parker.
 Mr. Charles P. Searle.
 Mr. Frank Wood.

A copy of their report is submitted herewith.

A detailed account of the work of the Departments of Cataloguing, of Publications, and of Printing, is contained in the Librarian's report. The Trustees believe that the publications of the Library, especially the Bulletins and Special Bibliographical lists, contain much not merely of temporary, but of permanent value, and they believe also that the mechanical execution of these publications is highly creditable. The account of the work of the Catalogue Department

reports the progress of the department, and the Trustees ask attention to it, as well as to the special reports of the Chief of the Department.

The Library has suffered by the deaths and resignations of some of those employed in its service.

The most conspicuous loss was occasioned by the death of Mr. Arthur Mason Knapp, who was twenty-four years in its service, and for twenty years the custodian of Bates Hall. His experience, ability and fidelity were universally acknowledged, and possessed an added charm by reason of his agreeable personal traits.

His successor is Mr. Oscar A. Bierstadt, who brings from the Astor Library in New York an experience which should well fit him for similar duties here.

In conclusion, the Trustees report that they believe that, with the facilities furnished by the recent expenditures, the Library, as a building, meets as well as possible the public needs. The graded system of service and appointment now for several years established secures fidelity, interest and a sense of permanence on the part of those employed. The Trustees believe that the Library not merely supplies a valuable school of instruction to those resident within the limits of the city, but secures for Boston a wide reputation for a liberal and wise public expenditure, of which it may well be proud.

FREDERICK O. PRINCE,
President.

SOLOMON LINCOLN,
Vice-President.

JOSIAH H. BENTON, JR.

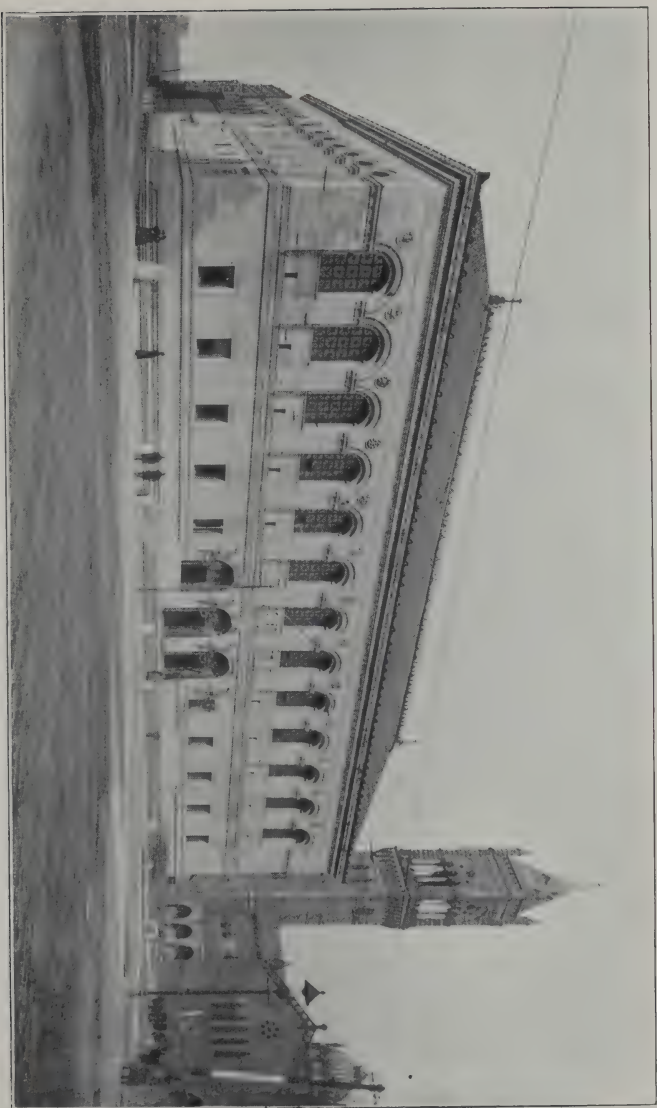
HENRY P. BOWDITCH.

JAMES DE NORMANDIE.

Adopted May 1, 1899, as of February 1, 1899.

Attest:

JAMES DE NORMANDIE, *Clerk Pro Tem.*



CENTRAL LIBRARY BUILDING, COPPLEY SQUARE.

LIBRARIAN'S REPORT.

To the Trustees :

I have the honor to submit my report for the year ending January 31, 1899.

The library system has been augmented during the year only by the establishment of one additional delivery station (Station U, established December 27, 1898). But a new department of work has been created at the Central Library (the Department of Documents and Statistics), and the scope of existing departments has, in certain cases, been enlarged. Four additional schools and one branch post office have been made deposit stations. To the only delivery station lacking a deposit collection at the beginning of the year this feature has now been added. So that the outlying system now comprises:

Ten branches, with large permanent collections of books.

Five reading-rooms, all of them also delivery and deposit stations, and one, Station P, having also an independent permanent collection of books.

Thirteen delivery stations, all also deposit stations.

Twenty-two engine-houses and one post office receiving books regularly on deposit.

Four public schools (two high and two grammar) receiving deposits.

One public school — a delivery station.

Five public institutions receiving deposits.

A total of sixty-one outlying agencies, as against fifty-seven on February 1, 1898.

The recent alterations at the Central Library building were not designed to provide for additional departments of work so much as to enlarge the facilities of existing departments. They have, nevertheless, secured accommodations for the new department of Documents and Statistics ; and in freeing the Lecture Hall have reopened opportunity for a service to the public not hitherto fairly entered upon by the Library.

FINANCE.

In General. — The Auditor's statement (Appendix I. of this report) shows in detail the receipts and expenditures of the Library during the year. Included, as heretofore, is a comparison of the expenditures from the general appropriation with those of preceding years. This table begins

naturally with the year 1895, for with that year, and the reorganization of the Library in the new building, a new scale of expenditures was entered upon. The comparison is item by item, except as certain items have been divided under a new classification adopted in consultation with the City Auditor during the past year.

The business of the Library increases progressively, though in irregular progression, from year to year. Tested by one statistic alone — the number of card holders (64,973, February 1, 1898, 72,005, February 1, 1899) — the increase during the past year has been 10 per cent.; taking the departments as a whole, and including departments (such as the Statistical) newly created, an estimate of 10 per cent. as an average increase in volume of work done would not be excessive.

The cost of service in 1898 exceeded that in 1897 by over \$8,000 (an increase of 6 per cent.); that of cleaning increased \$2,000; and expenditure for repairs, and for furniture and fixtures (requisite in connection with alterations at the Central Library and Branches), exceeded that for 1897 by some \$8,000.

A reference to the Auditor's statement will show that the total expenditure from the city appropriation in 1898 (\$246,855.87) was nevertheless practically no greater than in 1897 (\$246,541.79).

The estimated cost of maintaining the Library		
during the year as submitted to the City Government in December, 1897) was		\$263,401 88
The amount granted (general appropriation) was but		\$245,000 00
Appropriated later for Statistical		
Department by transfer		1,498 98
Balance from 1897		356 89
		246,855 87
Discrepancy		
		\$16,546 01

which amount represented estimated expenditure to be avoided if the department was to come through the year without a deficit.

The expenditure was avoided, and the department has come through the year without a deficit. But it has done so only by reducing the purchase and rebinding of books below a proper and economical level, and by omitting purchases of fuel, stock and supplies usually made toward the end of the fiscal year. The cost of these latter is to draw heavily upon the appropriation for 1899 at the very beginning of the new

fiscal year. The estimates for 1899 have, therefore, sought to provide for arrearage of purchase in several directions, and in part for the great arrearage in binding (particularly explained below), as well as for necessary increase of the payroll under the graded service system.

The total amount requested for 1899 was \$287,059.

The amount appropriated, however, is but \$255,000.

It is to be observed that two sources of income available prior to 1898 were cut off at the beginning of that year. One was rentals from the Old Library building, the other was receipts from fines and sales of Library publications.

The rentals yielded in 1895	.	.	.	.	.	\$3,101	98
“ 1896	.	.	.	.	.	5,749	00
“ 1897	.	.	.	.	.	8,600	00
“ 1898	.	.	.	.	.	10,000	00
The fines and sales in 1895	.	.	.	.	.	3,560	91
“ 1896	.	.	.	.	.	4,177	41
“ 1897	.	.	.	.	.	5,091	74
“ 1898	.	.	.	.	.	5,552	32

The appropriation bill of 1898 provided that all such revenue of the department should be turned in to the general income account of the city. It is no longer specially available for this department.

While, therefore, the general appropriation for 1898 exceeded that for 1897 by \$10,000, the actual income of the Library applicable to general purposes was in 1898 (excluding balances) nearly \$2,000 less than in 1897.

The sale of the Old Library estate would in any event put an end to revenue from rentals. The receipts from fines and from sales represent, however, a continuing contribution by the department to the general income of the city. It is to be remarked that the gross receipts which the Library is required to turn over make no deduction for expense incurred by the Library in collection (of fines) and cost of production (of material sold). The cost to the Library of collecting \$4,800 of fines is over \$1,500. The cost of producing the publications sold is far in excess of the gross receipts from sale.

Prior to 1898 receipts from such petty income were used temporarily to meet petty current expenses and book bills less than \$10, payable by the Library Auditor, an adjustment being made monthly. By an order approved March 3, 1898, the City Council authorized the transfer to the Library of a lump sum of \$1,500, to be used for such purposes, the amount being charged to the appropriation of the department,

and a final adjustment with the appropriation being had before the close of the fiscal year.

The sum of \$1,498.98, noted above, was transferred by the Mayor from the Reserve Fund to cover the expense for a *fraction* of the year of the Statistical Department, established in July, 1898. Two thousand five hundred dollars was authorized, but only \$1,498.98 proved to be necessary.

With each year of its development the Library requires a larger sum for its maintenance.

The increase in the aggregate only keeps pace with the growth of population of the city,¹ and with the increase in the volume of work which the department is called upon to do. In these respects the Public Library is on no different basis from the Public Schools. It also is not a single isolated institution within rigid limits, but is a *system* attempting to respond to the needs of a city fast growing in population and in needs. It also, by its own very growth, creates a new demand, and the needs to which it responds not merely grow in volume, but develop continually in character. It cannot remain stationary: if it does not advance and expand it must degenerate.

Permanent Improvements.—A most important contribution on the part of the City of Boston was the sum of \$100,000, to be expended “upon the new Library building and the fittings thereof.”

Of the total sum of \$100,000, \$13,654.85 was required for work already done and paid for by advance from the original building appropriation. This left \$86,345.15 available for the work undertaken since May, 1898. This work, when completed, will have exhausted the entire amount.

Endowments.—One further endowment has recently become effective. This is a gift of a principal sum of \$2,852.41, contributed by relatives and friends of the late Henry Sargent Codman, to form a memorial fund. The income will be used in the purchase of books upon landscape gardening—a designation most appropriate, as the gift is to the memory of a landscape architect of achievement and great promise.

With this fund the endowments of the Library aggregate but \$270,000. Of this \$50,000 is the Todd Newspaper Fund. The total of endowments the income of which is applicable to the purchase of books is but \$220,000. The

¹ The increase as between 1894 and succeeding years is, of course, disproportionate, 1895 being the first year in the new building, and involving a different scale of activities and expenditure.

income of this is but a little over \$9,000 per year. Under necessary reinvestment at lower rates of interest this income is steadily diminishing.

The appropriations granted by the city each year do not and can not cover more than the general maintenance expenses of the Library and the purchase of the more popular books. The reference departments of the Library, the departments that are to make it a great reference library for scholars, can be built up only by private gift. The sum of \$9,000 per annum is painfully insufficient. At most it enables the Library to keep up with essential current publications. But when, from time to time, important special collections are thrown upon the market to be competed for, the Library is helpless. Its competitors have great emergency funds which they can apply at will to just such purposes. It has none. Each year it practically exhausts its income in ordinary expenditure.

In consequence it has constantly the mortification of abstaining wholly from competition or, if it venture a bid upon a few items peculiarly within its province, of being outbid by other institutions.

There is a general impression among the citizens of Boston that the general and even development of the Library is amply assured by endowment and appropriation. This is an error which ought by every means to be corrected. On its popular side the Library is developing normally. The scholarly side is *not* developing in proper proportion. On this side the Library is relatively losing rank. It will not, cannot, regain this rank until the citizens of Boston come to its aid with further endowment.

For convenient reference I summarize here certain portions of the Auditor's Exhibit, as (for 1897) on pp. 10-12 of my report of last year.

GROSS INCOME AND EXPENDITURE.

Gross Income. — The gross income of the Library from all sources, including balances February 1, 1898, except special appropriations, was as follows:

General appropriation	\$245,000 00	
Transfer	1,498 98	
		\$246,498 98
Rentals from Old Library building: balance February 1, 1898		356 89
<i>Carried forward.</i>		\$246,855 87

<i>Brought forward</i>	\$246,855 87
Trust funds: income received from City Treasurer, ...	¹ 16,174 67
Miscellaneous donations for purchase of books, including balance of Todd Fund	960 88
Exchange account	1,371 78
Interest on bank deposit	1,600 61
London accounts: balance February 1, 1898, as follows:	
Trust funds	\$14,628 19
General book funds	12,646 67
Interest on above	771 57
	28,046 43

\$295,010 24

<i>Expenditure.</i> — From general income	\$246,855 87
From exchange account (money refunded)	13 39
From trust funds income (includes Todd Fund)	13,674 11
From general book funds	3,380 14
From miscellaneous gifts, including balance of Todd Fund	656 53
	\$264,580 04

A nominal balance on February 1, 1899, would appear as \$30,430.20. This is, however, subject to outstanding obligations, and in part to special restrictions. The available balance is but \$21,835.40, made up as follows:

Applicable to photographs	\$42 21
Applicable to books, as follows:	
Trust funds income: nominal balance	\$17,376 38
Less outstanding orders and necessary reserve for continuations	6,101 67
	\$11,274 71
General book funds	\$9,790 47
Less outstanding orders	2,493 33
	7,297 14
	\$18,571 85
Exchange account	1,358 59
Interest: domestic account	1,600 61
Cash donations: balances on hand	262 14
	21,793 19
	\$21,835 40

¹ The actual income collected by him during the year was but \$11,806.67.

It is to be observed further that the bulk of the above available balance is composed of funds applicable only to the purchase of books, and to a great extent of funds which must be reserved for the purchase of books of a very special character, *e.g.*, the Charlotte Harris Fund—balance \$3,818.18—restricted to the purchase of books published prior to 1850.

SPECIAL APPROPRIATIONS.

Those with apparent existing balances are the Building appropriation (construction of Copley Square building), Furnishing appropriation (Copley Square building), and the appropriation for Improvement of the Broadway Extension Delivery Station. The Auditor's exhibit shows:

Building Appropriation.—Nominal balance uncertified February 1, 1898 \$76,430 62
New loan (May 27, 1898) 100,000 00

\$176,430 62

Expenditures, 1898 66,314 62

Nominal balance \$110,116 00
Against which are contracts and outstanding orders amounting to . \$105,685 24
And claims amounting to 8,085 61

113,770 85

Indicating a deficit of \$3,654 85

to be met by application of the balance of the Furnishing appropriation so far as necessary.

Furnishing Appropriation.—Balance February 1, 1898 \$15,730 01
Expenditures, 1898-99 2,393 80

\$13,336 21

Balance February 1, 1899 \$13,336 21
Against which are contracts outstanding for 6,399 87

\$6,936 34

Balance \$6,936 34

which is likely to be fully exhausted as above and by work already projected.

Broadway Extension Improvement Appropriation.

Balance February 1, 1898 \$3,989 56
Expenditures, 1898-99 532 68

\$3,456 88

Balance \$3,456 88

BUILDINGS AND EQUIPMENT.

CENTRAL LIBRARY.

It seems well to insert here a brief summary of the alterations and improvements effected with the special appropriation granted in May last.

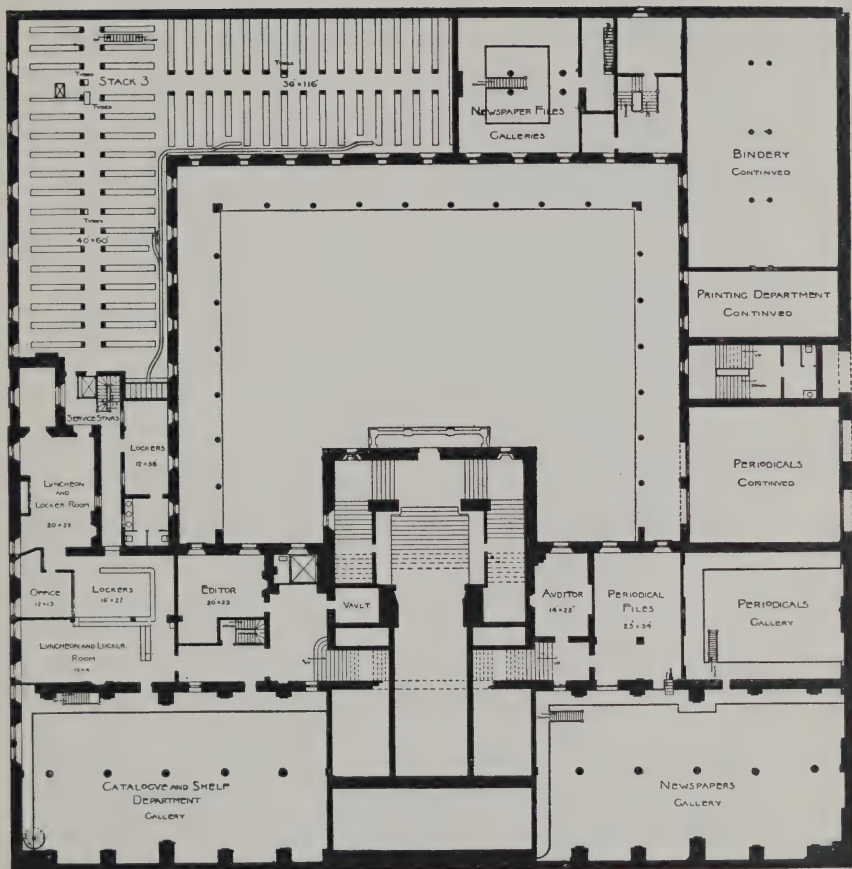
The only additional space gained has been in the enclosure of the Boylston-street driveway. This secured an addition of some 33,000 cubic feet to the space available for practical active use. But in enabling the current newspapers to be removed from the Lecture Hall it freed over 143,000 cubic feet of space, which may be available for other uses.

Adaptation of space to different uses has, however, altered considerably the location or boundaries of certain departments. The floor plans published in last year's report are therefore reproduced in this year's, with the alterations incorporated.

The work done prior to May, 1898, but chargeable to the special appropriation of \$100,000, was chiefly upon the heating and ventilating system: a third engine, additional radiating surface, etc. In July was entered upon the scheme of improvement in the system recommended by Prof. S. H. Woodbridge, as the result of his examination and tests of the preceding winter. The work actually done has considerably exceeded the recommendations made by him at that time, new necessities developing as the work itself progressed. In brief, the more important features have been: the substitution of a 10-foot for the 18-foot intake fan in the basement, and of an exhaust fan of different design and efficiency for that under the roof; the substitution of steam for hot-water coils, to raise the temperature of the air drawn in from the court-yard to be forced up through the ducts; the installation of special ventilating fans in the engine-room (incidentally serving to dry out storage space under the platforms), in the public lavatories and elsewhere; more ample provision by new or unused ducts for the ventilation of rooms (as the periodical room), whose ventilation was clearly inadequate; and, of course, such changes in and additions to the system as were necessitated by the recent structural alterations.

With the additional or improved fans several additional electric motors were necessary, including a 20-horse power motor for the intake fan. The sanitation of the public lavatories required certain changes in the plumbing.

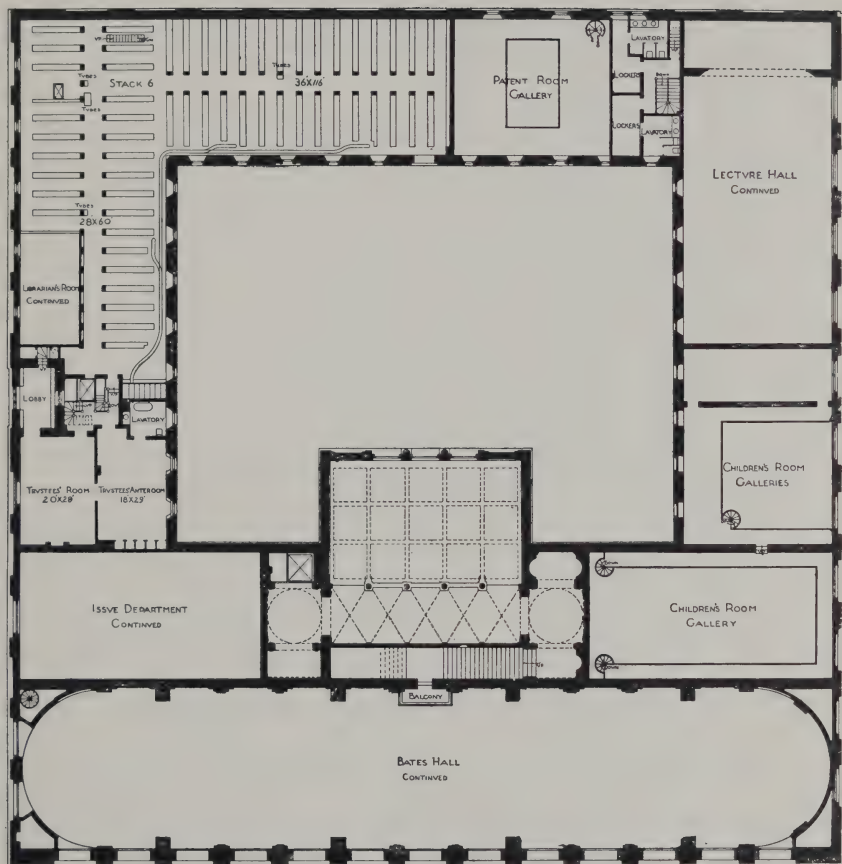
Unusually high tides had developed leaks in the main ventilating duct under the engine-room. Water forced up



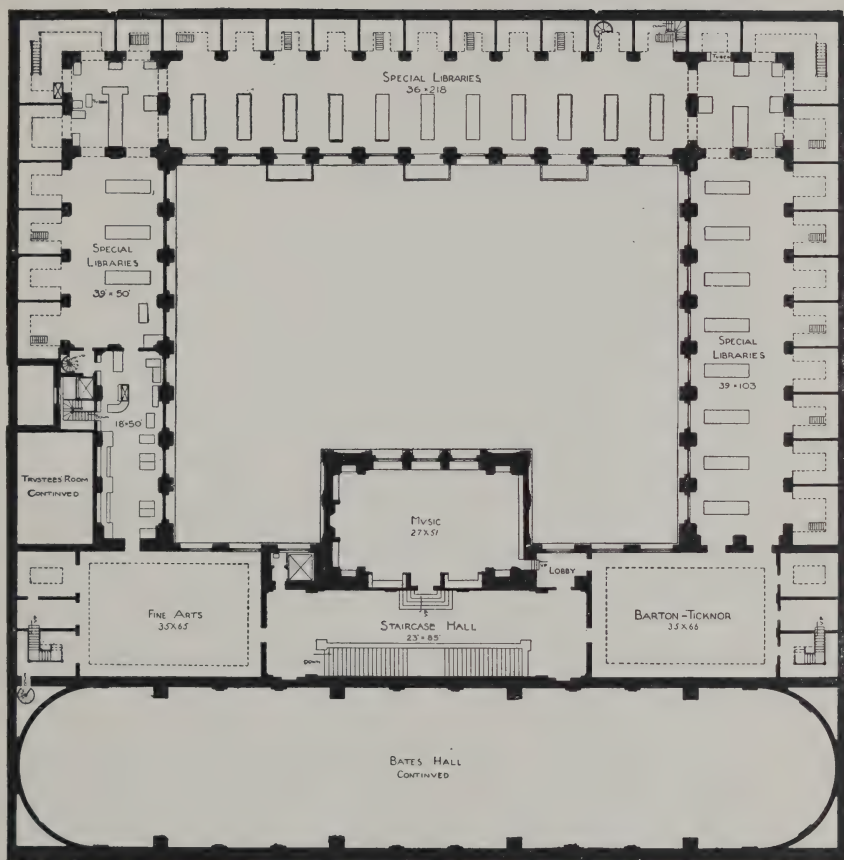
CENTRAL LIBRARY, ENTRESOL A.



CENTRAL LIBRARY, BATES HALL.



CENTRAL LIBRARY, ENTRESOL B.



CENTRAL LIBRARY, SPECIAL LIBRARIES.

through these leaks formed stagnant pools from which offensive odors were carried up to the main reading-room, so that the duct vitiated the very atmosphere it was designed to purify. The portion of the duct under the engine-room has been lifted out of reach of tide-water, secured by solid concrete against possible contact, and reconstructed throughout.

The full result of these various alterations is not yet apparent, for some of the new apparatus (*e.g.*, the intake fan itself) is not yet in operation. But that the essential improvements sought will have been secured there can be no doubt. The new intake fan, smaller as it is, at high speed discharges through the ducts 60,000 to 75,000 cubic feet of air a minute, as against 30,000 to 45,000 cubic feet discharged by the old. This air is now sufficiently heated to contribute positively to the temperature of each room, as well as to its ventilation. The ventilation of the public lavatories, which had been matter of great concern and much unsuccessful experiment, is now perfect. And the changes throughout appear certain to accomplish the ends sought.

The cost of these (over \$12,000) has been so great as to diminish materially the amount of the appropriation available for the miscellaneous work. The more significant of this may be summarized (I omit details and changes — as new doorways, etc. — merely incidental) as follows:

Increase and rearrangement of space for readers and for administration, additional machinery and administrative equipment and furniture.

ACCOMMODATIONS FOR READERS.

I. Inner Periodical Room.

The Boylston-street driveway has been enclosed to form with the adjacent room, an inner periodical room. The present periodical room, on the north-east corner, first floor, has been enlarged by the removal of a partition, and has become the newspaper room. The use of the periodicals and newspapers, which is allied, will thus be provided for in three large rooms conveniently *en suite*. The room recently occupied by the newspapers has been released for other uses, and the newspapers are now in a room directly accessible from the main vestibule, not necessitating, as heretofore, the transit of a third of the building.

The readers of periodicals, moreover, will be exempted from the jarring of the light and power engines.

II. Children's Room—Patent Room.

The present Children's Room has been relieved of the registration desk, which has been removed to the Delivery Room. The children's department has been augmented by the addition of the room adjacent to it, formerly the Patent Room. This is to be fitted up as a general reference reading-room, with a good reference library, including maps, photographs, etc., useful to children in their school work. In the gallery of this room will be a kindergarten library for teachers, augmented from the present collection.

The collection of drawings and specifications of patents has been removed to a room in the west wing, reached from the court-yard, and from the Special Libraries' floor. This room has been enlarged and provided with galleries, and corresponds to Stacks 4, 5 and 6. Besides the collection of patents it will provide in part for the work of the Statistical Department, recently established, being directly adjacent to the collection of documents on the Special Libraries' floor. It has also been connected with the bound volume Newspaper Room, containing the most important of the files of newspapers.

ADMINISTRATION.

I. Delivery Room.

On the Blagden-street side (south wing) the Librarian's office, adjacent to the Abbey room, has been thrown into the old tube-room, so called, from which books are issued from the stacks. The space for the issue of books has thus been doubled. With it the delivery counter has been doubled and provides now distinct divisions for the return and for the issue of books. The registration desk, formerly in the Children's Room, has also been provided for at this point: an essential, as its work is intimately connected with that of the Delivery Department, and its remoteness from that department hitherto has forced the public to traverse the whole width of the building for needs that properly should be treated together. The old system of pneumatic tubes, involving fifty-six stations in the building, has been overhauled, and new and improved terminals substituted. The twenty-eight terminals in the Delivery Room, formerly stretching in a line, have been grouped in a circle for more convenient operation. In addition, an auxiliary system of improved tubes (operating by suction, instead of by pressure) has been installed, which not merely connects the Delivery Room with each one of the six stacks and with the Special Libraries' floor, but connects every stack with every other stack, so that slips may be sent from stack to stack without

being returned to the Delivery Room. An apparatus has been installed in the Delivery Room, itself novel to library use. This is a "pick-up carrier," so called. Its purpose is to transport the various slips between four points in the Delivery Room doing business with one another, — the issue and return desks, the record trays, and the pneumatic terminals. The "carrier" is a cable railway operated by electricity. At fixed points at intervals upon the cable are carriers, which, as they reach a station, pick up a batch of slips awaiting their arrival, carry them forward and deposit them at such succeeding station as may be their destination. The carrier is not a box, but is more in the nature of a hand, which clasps the batch of slips by closing of the thumb and middle finger, and releases them automatically by the opening of these two.

The automatic precision with which this work is carried on is remarkable. The convenience of the apparatus for such use is that it keeps the flow of application slips practically continuous, whereas, when transferred by hand, they can be transferred only in batches, at intervals, to the disadvantage of any slip that may be undermost.

II. Executive and Other Rooms.

A new set of rooms has been created for the Librarian and the Executive Department generally, consisting of an ante-room, main office, private office, and a room for records and files. This suite of rooms has been connected with the Trustees' Room through a lobby formerly open to Blagden street, so that the whole series of rooms representing the general administration is now in proper relation *en suite*. This lobby will contain the Chamberlain Collection of autographs.

The Librarian's office is still, however, very conveniently accessible to the public, being reached directly from the Delivery Room by a corridor left open on the Blagden-street side.

The new administrative offices occupy a part of Stack 5 on the Blagden-street side. Part of Stack 1 and of Stack 2 have also been equipped for administrative uses. In Stack 2, space has been fitted up for the work of the Branch Division, so called. This is the department at the Central Library having to do with the responsibility of the general administration of the outlying departments of the Library system, which includes the 28 Branches and Delivery Stations, and the work connected with the issue of books to 23 engine-houses, certain of the reformatory institutions, and various schools. This division also deals with the applications from these outlying departments for books at the Central Library,

and the delivery of these books. Within the past four years the circulation of books from the Central Library, through the outlying departments, has greatly increased. In addition to the circulation of books upon specific application, there are now also deposit collections to be provided for. The enlargement of the old work, together with these new undertakings, has necessitated the organization of a considerable department, the head of which is the Supervisor of Branches. The space assigned to the work of the Branch Division, when the new building was opened, was but 216 sq. ft.; the space now provided for it in Stacks 1 and 2 is 1,766 sq. ft. In Stack 1 is a shipping-room, where all the books enter, and from which they are despatched. It is reached from a window on the sidewalk directly accessible to the library wagons. In Stack 2 is the provision for the administrative and clerical work, with shelving for the collection of books drawn upon more specially for deposit use.

The adaptation of portions of Stacks 2 and 5 for administrative purposes has necessitated enlargement of the whole series of windows on the Blagden-street side, at these levels, from 2 ft. 3 in. to 4 ft. 10 in. in width.

The stacks from the basement to the Special Libraries' floor have been connected at the south-westerly corner by a staircase. Intercommunication between the stacks has also been secured by the auxiliary pneumatic tube system, above indicated, and by the electric book-lift, mentioned below.

The Ordering Department.—This room has been more than doubled in size by the addition to it of corridor and other space. It has also been greatly improved as to light, and forms now a most admirable space for the business of securing and receiving books, and preparing them for the Catalogue and Shelf Departments.

On this wing also have been arranged offices for the Chief Janitor (formerly in the main vestibule) and for the Custodian of Stock, so called, the official who has the responsibility of purchasing the two hundred odd articles, from pencils to towels, in current use, and the duty of distributing them to the several departments upon requisition provided by the Librarian; and who has also the custody and distribution of library forms and publications.

Stock Room.—In the basement a large space has been fitted up as a stock room for the storage of these articles, and of library forms and publications.

Duplicate Room.—Adjacent to the Stock Room is space fitted up with shelving for the Duplicate Room, where duplicates not needed for Library use may be sorted and arranged for exchange, distribution and sale. Additional storage space

has been cleared, and is to be fitted up in the basement on the Blagden-street wing to the west of the service stairway.

Two electric elevators have been installed in this wing, one a passenger and freight elevator for service use, with a capacity of 1,500 lbs., at 150 ft. a minute. This has been installed in the centre of the service staircase, which has been more or less remodelled for the purpose. The fact that this elevator has 12 landings within a lift of 59 ft., indicates the business that it will be called upon to do. The second lift is an electric book-lift, traversing the stacks and reaching the Special Libraries' floor, which carries only small lots of books, and is operated by the attendant despatching the load; that is to say, it carries no attendant, but may be called to any point and despatched from it by the pressure of a button. When being loaded at any point it is automatically exempt from call to any other point.

Editor's Room, Luncheon Rooms, etc.—In the Entresol (A), south side, have been provided an office for the Editor of Library Publications, an office for the use (jointly) of the Chief of the Issue and of the Chief of the Ordering Departments, and luncheon and additional locker-rooms for employees of both sexes.

The alterations above described represent only the main features of the work on the building accomplished during the past eight months. Details incidental to the main work were, of course, many, and in a measure costly. As in the case of the heating and ventilating system, the total work actually done has exceeded by a hundred per cent, the work originally planned. Its total cost has nevertheless been kept within the fraction (\$70,000) of the appropriation available for it. This has been possible through the ingenuity, skill and exceeding watchfulness of the architects, and through the competence, care and exceeding integrity of the general contractors. For such work as was to be undertaken precise specifications were impossible. The architects recommended that a competent contractor be selected, without competition, and the work done by and under him, by the day, with a commission upon actual cost. The Mayor, under advice of his consulting architect, assented to this. As a result the work has not merely been careful, thorough and appropriate, but has, I believe, cost the city less by thousands of dollars than if carried on in any other way, and it has been done with the utmost consideration for the convenience of the public and of the administration. It was so arranged that it did not for a single day necessitate absolute cessation of the service in any department.

The very considerable amount of furniture and fixtures necessary to the equipment of the new or enlarged departments has been provided for out of the balance of the Library Building Furnishing appropriation.

Repairs incidental to the alterations, or convenient at the time, — including a great deal of painting (catalogue and periodical rooms, stacks, corridors, etc.), — have been paid for out of the general appropriation. Considerable repairs reported to be necessary upon the roof have been deferred until the coming summer.

The cleaning of building and books during and since the alterations has involved a specially heavy expense, also met by the general appropriation. Every volume of the half-million odd in the Central building has, within the past two months, been taken down and dusted, and the shelf wiped off beneath it.

The improvements above described do not, indeed, absolutely perfect the building for present uses. The issue of books from the stacks for reference readers, and the issue for borrowers, are still together dependent upon one set of attendants, one system of mechanism and one channel of issue. The books required from the stacks by the reference reader in Bates Hall must still be forwarded to him from the issue desk by hand, through a public room at times crowded with sightseers. And, ample as is the general space provided for readers, and sufficient (for a few years) as is the shelving, there is very great need of rooms set off for special collections for the use of classes and for specialized research. But most embarrassing difficulties have been overcome, and the most pressing needs of the moment have been met; and what has been done will add greatly to the comfort of the public, and greatly to convenience in administration.

I have treated these alterations at the Central Library building somewhat fully — to the necessary condensation of those portions of my report touching routine — for the very reason that they were out of the routine, and formed the most significant episode of the year.

BRANCHES.

No new structure has been erected for any of the outlying departments. For certain alterations effected — particularly at the Brighton Branch — I refer to the report to me of the Supervisor of Branches, an extract from which I append to mine.

It is obvious that library facilities are distributed very unequally throughout the city, and that such as exist are

ill-proportioned to existing needs. One district has the benefit of a collection of books numbering 35,000 volumes, in an independent building, ample, well equipped and attractive; another, with perhaps double the population to be served, and more remote from the main collection, has at its disposal but a third as many books (a third in number—hardly a fifth in efficiency), and for accommodations, meagre, ill-ventilated, inconvenient and uninviting rooms, in a building devoted mainly to other and inconsistent uses, in a neighborhood tending to demoralize its readers. Such contrasts exist. New departments may be established, deficient facilities be supplied, only by considerable expenditure and laborious effort applied in detail. The effort to improve the material facilities and the service in existing departments (as indicated in the Supervisor's report) is now earnest, and will be persistent. But the present deficiencies cannot be supplied without a large direct expenditure upon new buildings (in certain districts), and alterations, repairs, books and equipment in others. The outlying departments cannot be brought to reasonable equality or into reasonable relation with the Central Library without an expenditure on buildings and books of at least \$500,000.

A supreme advantage would be the application of such a sum all at once under a general scheme of improvement.

WORKS OF ART.

Chantrey's Scott.—A copy in marble (by John Hutchison, R.S.A.) of the bust of Sir Walter Scott, by Chantrey, has been received as a gift to the City of Boston from the Committee on the Scott Memorial in Westminster Abbey. The bust is a duplicate of that placed in Westminster as a result of contributions from both sides of the Atlantic. The correspondence with reference to it will be found in the appendix. It awaits formal presentation to the public before receiving a permanent location.

BOOKS.

Appendices II.-V. give the extent of the Library by years, a summary of the contents of the Library on January 31, 1899, the net increase of the several departments during the past ten years, and the classification of the material in the Central Library¹ on January 31, 1899.

According to last year's report, it appears that the number of volumes in the Central Library and branches on January 31, 1898, was 698,888, of which 528,079 were in the Central

¹Owing to the reclassification of the branch libraries, recently begun, but not completed, classification of these collections has been omitted in this year's report.

Library. By the tables appended to this report it appears that on January 31, 1899, the number in all departments is 716,050, of which 550,822 are in the Central Library. The net increase is thus 17,162 volumes. The net gain to the Central Library is 22,743 volumes. The gain to the branches by accession is more than offset by considerable transfers to the Central Library of worn-out or unserviceable material, so that the year leaves outlying departments with 5,581 volumes less than at its beginning.

The total expenditure for books and periodicals during the past year was \$34,935.10, as against \$40,351.62 in 1897. This does not include \$1,836.40 expended from the income of the Todd Fund for current newspapers; nor \$488.53 paid for books for Delivery P out of the special appropriation; nor \$732.17 expended by the Fellowes Athenæum for books for the Roxbury Branch.

The expenditure was distributed as follows:

	1897.	1898.	1898.
For Central Library (including deposit collection) . . .	\$20,497 84	\$13,175 51	
For branches . . .	5,303 28	4,021 82	
	\$25,801 12	\$17,197 33	
Trust funds expended for books:			
For Central Library . . .	8,114 74	11,837 71	
	\$33,915 86		\$29,035 04
City money expended for periodicals :			
For Central Library . . .	\$4,766 87	\$4,276 66	
For branches . . .	1,668 89	1,623 40	
	\$6,435 76		5,900 06
			\$34,935 10

The accessions during the past year (as distinguished from the statistic of books actually located, and excluding mere transfers from one department to another) have been as follows :

Added by purchase :

	Volumes.		Volumes.		Volumes.
Central Library . . .	10,357	Branches . . .	7,970	Total . . .	18,327

Added by gift :

Central Library . . .	6,958	Branches . . .	185	Total . . .	7,143
	17,315		8,155		25,470

As against a total of 33,131 volumes in 1897.

The library of the American Statistical Association will form a considerable accession not included in the above figures. It has been omitted, because the portion of it which is to be retained for our shelves has not yet been divided off exactly from that which is to be used for exchange or other purposes.

PURCHASES.

Among the purchases of the year have been the following:

Americana. — Hylacomylus. "Cosmographiae introductio cum quibusdam geometriae ac astronomiae principiis ad eam rem necessariis. Insuper quattuor Americi Vesputij navigationes." 1507. Colophon. (The suggestion to which we owe our national name is found on the reverse of the fifteenth leaf.)

Smith. "The True Travels, Adventures, and Observations of Captaine John Smith. Together with a continuation of his Generall History of Virginia," etc. London, 1630.

Smith. "A Map of Virginia." With a description of the countrey (sic.), etc. Oxford, 1612.

Hamor, Ralph. "A True Discourse of the Present Estate of Virginia." London, 1615.

Ptolemæus. "Geographia universalis, vetus et nova, complectens Claudii Ptolomæi Alexandrini enarrationis libros VIII. . . . Basileæ apud Henricum Petrum." 1540. (The first edition of Ptolemy by Sebastian Munster.)

Howgill, Francis. "The Popish Inquisition newly erected in New England." London, 1659. (Contains an account of the reception which the Quakers met with in Boston.)

Reeve, John, and Muggleton, Lodowick. "Joyful News from Heaven." London, 1658.

Lawne, Fowler, Sanders and Bulward. "The Profane Schisme of the Brownistes or Separatists." 1612.

Also An indenture given and signed by Edward Tyng and others to the Company of the Waterworks to lay and maintain a conduit "in the street now called Conduit Street" (Union street), and acknowledged before "Jo. Endecott gov." 1656. (This was the beginning of the Boston Water Works.)

Broadsides. — At the Philadelphia sale of the Bancker Collection of broadsides the Library had of necessity to confine its purchases to those of especially local interest. They include:

(1.) Letters from Washington to Gage, and Gage to Washington, relative to the cruel treatment of prisoners. "Phila., September 29th, 1775."

(2.) Bombardment and Burning of Falmouth. "An Express just arrived from General Washington's Camp at Cambridge, Oct. 24, 1775."

(3.) News of the Battle of Bunker Hill. "New York, June 24th, 1775."

(4.) Account of the death of Lord Percy, April 25, 1775.

There may be mentioned also, a highly important historical letter describing in detail the Continental and British defences in and around Boston, by Jesse Lukens, one of the Massachusetts Riflemen, to Jonas Shaw, dated Prospect Hill, September 15, 1775; also a London edition of the Massachusetts Charter, published in 1692, and "The Laws of Maryland made since 1763." Annapolis, 1787.

Cuba, Porto Rico and the Philippines.—A selected collection of works relating to the geography, languages and history of Cuba, Porto Rico and the Philippines, was purchased in Leipzig at a cost of 1,300 marks.

Statistics and Economics.—From Amsterdam were obtained some rather notable files of statistical and economic serials, containing among them a complete set of the Dutch Economist—"De Economist"—1852–1897; papers relating to economical reform, etc.: "Staatsblad der Vereenigde Nederlanden," 1813–1897, a complete set of original editions of the Dutch state papers; "Staatsblad van Nederlandsch-Indie," 1816–1897, the official edition of the state papers of the Dutch East Indies; and "Verzameling der Consulaire berichten en verslagen," etc., 1865–1897, the Dutch Consular reports.

Maps.—The most important purchase of maps has been the collection "Hydrographie française," containing the official sea-charts of the French Navy Department, and consisting of more than 1,400 maps brought together from 1845–58. There were also bought and mounted for the new map cabinet, two sets of Stanford's maps of Europe, Asia, Africa, Australasia and North and South America, and an additional set of United States post-route maps for the same purpose. Another purchase bearing on the subject is:

"Abel Janszoon Tasman's Journal of his discovery of Van Dieman's Land and New Zealand in 1642. With photolithographic fac-similes of the original manuscript . . . and fac-similes of original maps. Amsterdam, 1898."

The geographical serials have been strengthened by the purchase of a set of the Italian periodical, "Cosmos," edited by G. Coro, and the "Deutsche geographische Blätter."

Other purchases of interest bought with the Trust funds are: Thirty volumes of the Bampton lectures, including the first issued in 1780 (the set is now but six volumes short); the Index to the London Times, and some 700 unmounted Photographs which include a selection illustrating the French school of painting, and Northern Schools in French Galleries, Northern Schools in the National Gallery, and in Berlin, Munich and Vienna; late photographs of the Italian school, besides Sewall's "Canterbury Pilgrims," and a number of Copley prints.

Reference Books for Children's Room.—From the city appropriation has been bought a collection of reference books for the Children's room, for which the sum of \$1,500 was allowed. Besides the encyclopædias, dictionaries and atlases, the collection includes the large illustrated editions of Duruy's History of Greece, and of Rome, Guizot's History of England, and of France, Rambaud's History of Russia, Green's History of the English People, and Winsor's Narrative and Critical History of America. The Riverside Natural History, Réclus's Earth and Its Inhabitants, the whole series of the Story of the Nations, also Longfellow's Poems of Places, Poole's Index to Periodical Literature, together with the minor reference books, biography, etc., make a useful reference library, for which as far as possible the books have been procured in strong and attractive bindings.

English Prose Fiction.—Sixteen hundred and thirteen volumes of current English prose fiction, representing 180 titles, were bought and placed in the Central Library, Branches and Deposit, at a cost of \$1,492. There were also bought 1,830 volumes to replace those worn out, and 1,900 additional copies of books of which the supply was not in any way adequate to the demand. Fifteen hundred of these were for Deposit use, and included 500 books for younger readers, making in all an aggregate of 5,450 volumes purchased at a cost of \$5,000 (as against \$9,650 in 1897-98).

French and German Literature: Replacements.—The works of Dumas père (literally worn out) have been replaced by a complete set in 300 attractively bound volumes for circulation. There were also replaced some 400 volumes of the more popular French and German authors.

Purchases under the last three heads, with the duplicate copies of books bought for use in connection with the schools, about 200 volumes, the necessary replacement of worn-out books, the books of the day (including a larger proportion than usual of those relating to economics and

statistics), have been made from the money which could be spared from the city appropriation — some \$9,000 less than the amount spent last year. With lessened resources it has been necessary to defer some purchases of fiction, especially for the branches. The outlay for current fiction this year has been nearly \$800 less than last year. While the sum total of expenditure for books and periodicals shows a difference of but \$5,400 less than last year, the amount spent from the city appropriation shows a difference of over \$9,000 less. The purchases from the Trust funds amount to \$4,000 more than in 1897–98, and that this was possible is due to the fact that \$1,500 was drawn from a fund so restricted as to be seldom available, and that a few thousand dollars had accumulated over the annual income.

GIFTS.

As to Works of Art and Endowment, *see supra*.

Gifts of Books. — The number of givers for 1898 is greater by some two hundred than in 1897, and greater by four hundred than in 1896. The full list of givers appears in Appendix XIII. Some of the more important of the gifts of books and manuscripts I note here. They are arranged alphabetically according to their donors.

GIFTS OF ESPECIAL IMPORTANCE, 1898.

From the American Statistical Association, through its Secretary, Davis R. Dewey, its library comprising about 5,000 books and pamphlets. This collection is rich in the issues of the statistical departments of foreign governments, and of state and municipal administrations. A notable feature is also to be found in the many pamphlets on slavery, missions, and local institutions of charities and corrections. (*See letter of gift.*)

From the Boston Browning Society — for the Browning collection — 37 volumes consisting principally of editions of the Brownings' Works, and three photographs.

From Allen A. Brown, Esq., 264 volumes for the Music Collection, including fifty volumes of modern operas (French, German, Italian), and fifty volumes of choruses for male voices.

From the Canadian government, at the instance of Sir Wilfrid Laurier, a full set of the official documents of Canada for the last two years, to be continued by the current issues.

From Prof. Francis W. Chandler, Boston, two folio volumes of "Municipal Architecture in Boston. From designs by Edmund M. Wheelwright." 1898.

From the Earl of Crawford and Balcarres, the "Autotype fac-similes of three Mappemondes" of the sixteenth century, from unique originals drawn at Dieppe in 1536, 1546 and 1550; 48 sheets in an imperial portfolio with a quarto volume of accompanying text, by C. H. Coote. (Bibliotheca Lindesiana. Collations and notes No. 4.) These celebrated maps (1) the Harleian, 1536; (2) Descellier's, 1546; and (3) Descellier's, 1550, are highly interesting in connection with Canada and the explorations of Cartier and Roberval; 100 copies only have been privately printed.

From the same source has also been received "A catalogue of English broadsides in the library of the Earl of Crawford," in a quarto volume, in which are chronologically arranged 1,814 English Broadsides covering a period of nearly 400 years — 1505–1897.

From Messrs. Copeland and Day, eleven volumes — current books of the year published by them.

From the various departments of the French government the Library has received important gifts. Among them are nine volumes of the French patents (Brevets d'invention), to be continued as issued, from the Minister of Commerce, and a set of the "Bulletin de géographie historique et descriptive du Comité des travaux historiques et scientifiques," 1888–98, from the Minister of Public Instruction.

From the family of the late William Lloyd Garrison, through Mr. Francis J. Garrison, the manuscript Letters, "relating to the anti-slavery movement in the United States during the years 1839–42." This collection continues an earlier file covering the years 1830–38, the gift of the Garrison family in 1894.

From the German Patent Office, the continuation of the "Patentschriften" in 4,704 numbers.

From the Committee on Education of the Privy Council, of Great Britain 65 volumes of their Reports, completing the Library file.

From the Patent Office of Great Britain, 131 volumes and 45 numbers.

From Col. Thomas Wentworth Higginson, 105 volumes for the Galatea Collection (established by Col. Higginson in 1895); and in this connection 12 volumes from De Witt Miller, Esq., — all relating to the history of woman.

From His Majesty the King of Italy, two volumes continuing the campaigns of Prince Eugene of Savoy (Campagne del Principe Eugenio di Savoia).

Through the generosity of Mrs. John A. Lewis, the following books were bought at the Deane Sale, and added to the John A. Lewis Collection:

Byles, God Glorious in the scenes of the winter. Sermon. Boston, 1744. Cotton, An Abstract of the Laws of New England. London, 1641. Cotton, The True Constitution of a particular visible Church. London, 1642. Cotton, A letter of Mr. John Cotton's to Mr. Williams. London, 1643. Cotton, Sixteene Questions of Serious and Necessary Consequence, propounded unto Mr. John Cotton, together with his answers to each question. London, 1644. Davenport, J. (Pastor of New Haven), Profession of the faith of that Reverend and worthy Divine, Mr. J. D. London. 1642. Moodey, The Great Sin of Formality in God's Worship. (Boston Lecture.) Boston, 1691. Moodey, Dialogue, containing Questions and Answers, from Judas' Fall, improved. New London, 1768. New England Primer, New York. M. Day. Robinson, A. W., A Justification of Separation from the Church of England. 1639. Robinson, A. W., A Second Manuduction for Mr. Robinson. 1615. Shurtleff, Sermon preach'd at New-Castle in New Hampshire, January 1, 1726, in Commemoration of the Sufferings, etc., of a Company of Mariners ship-wreck'd upon Boon Island Rock. Boston, 1727.

From the Duc de Loubat, Galerie Américaine du Musée d'Ethnographie du Trocadéro, part 2, continuing part 1, received in 1897; also Ignacio Borunda, Clave general de Jeroglificos Americanos. Rome. 1898.

From the Trustees of the Old South Church, for deposit in the Prince Library, a manuscript fragment of the "Annals of New England," consisting of nine leaves in the handwriting of Thomas Prince, containing some matter not found in the published work.

From the Royal Scottish Society of Arts, Edinburgh, a complete set of the Society's Transactions, the continuation to be sent as issued.

From the U. S. Superintendent of Documents, 189 volumes of Government publications. These were selected from a list of duplicates sent by the Superintendent, and filled in the Library files by so many volumes.

From the estate of Kate Field, through her literary executor Miss Lilian Whiting, a collection of between 700 and 800 manuscript letters, — the correspondence of Kate Field, covering a period of nearly forty years — together with a number of photographs, and manuscripts of some of her works. Miss Whiting has thoughtfully given a sum of

money, to be annually renewed, for the preservation and care of this material to be known as the "Kate Field Collection." The work is now in process of mounting and indexing the manuscripts, and they will eventually be bound in volumes similar to those in the Chamberlain Collection.

From His Excellency Governor Wolcott, the "Abstract of the log of the Cristobal Colon from April to July 3, 1898."

From the estate of Prof. Josiah D. Whitney, of Harvard College, fifty books and pamphlets relating to literature, etc., and including some early editions of the Latin classics.

From the Wyclif Society, London, a full set in 21 bound volumes of Wyclif's Latin works.

BINDING.

The work done by the Library bindery during the past year is indicated by the following schedule :

	Vols.
Books bound in Bates Hall binding	8,890
Large daily newspapers	52
Branch newspapers	58
Pamphlets	3,905
Total	<u>12,905</u>
Books repaired	3,877
Catalogues, novels and periodicals stitched into covers, .	1,545
Cards mounted and bordered	2,524
Maps, charts and broadsides mounted on cloth	1,056
Volumes guarded	1,570
Portfolios made	154
Boxes made	76
Blocks made	602
Pads made	6
Pouches made	15
Temporary covers made	855
Sign cards leathered and lettered	10
Library publications folded, stitched, and trimmed	124,284
Library publications folded, sewed, trimmed and covered, .	9,019
Photographs and engravings mounted	3,392
Office desks covered	2
Time on miscellaneous work	42 $\frac{1}{2}$ days
Time cutting and bundling for the Printing Department. .	48 days

I quote in detail these figures, because they are significant of the various unconventional service which a bindery may render if well equipped, conveniently at hand, and under direct control. As an auxiliary to the Printing Department the Library Bindery is indispensable. During the past year it has been crippled, as have other departments, by illness.

The aggregate volume of work done has, nevertheless, increased over that for 1897. The number of library publications which it has handled (folded, stitched, trimmed, etc.) 58,424 in 1896, and 102,442 in 1897, rose to 133,304 in 1898

In January, 1899, a wire-stitching machine was purchased which will handle much of the pamphlet work at a saving of labor and expense.

The outside contract work (binding in cheaper form of branch books and old Lower Hall books) has comprised the binding of 9,024 volumes as against 13,929 in 1897. The total cost was \$2,460.28. This was greater per volume than in 1897, owing to the new specifications which call now for neater and more durable material, more thorough sewing and the lettering of titles.

Repair.—The repair of books in the first stages of dilapidation is the work of special attendants in the Issue and Branch departments. It involves each year stitching or pasting, or both, of some 3,000 volumes.

Arrearage.—The output of the Library Bindery, above detailed, represents no more than is necessary to cover (1) the binding of material received in paper covers, (2) the binding of the 1,500 odd current periodicals of the twelve-month as made up into quarterly, half-yearly, or yearly volumes, and (3) the rebinding of books worn in the current use of the year. If the allowance for this latter seem large, one need only consider the normal wear and tear incident to an aggregate "circulation" and "reference use" of over two million bound volumes a year; and consider further that the stress of this use, so far from being distributed evenly, falls chiefly upon 150,000, perhaps, of the 700,000 volumes in the library system. An estimate of 15,000 of these volumes as annually needing rebinding is an allowance of but ten per cent. of the portion of the Library in most active use, but $2\frac{1}{2}$ per cent. of the entire collection, and but $\frac{7}{10}$ of one per cent. upon the use.

In addition to the current work there is, however, a very great number of books scattered through the main collection whose condition demands the attention of the binder. The meagreness of space in the Old Library Building during the later years of occupancy, and the meagreness of the appropriations, caused postponement upon these. The handling incident to removal and relocation has by no means improved their condition, and now there is scarcely a shelf—there is certainly not an alcove—in the new building which does not contain volumes with at least signatures or plates loose,

or backs broken. In the aggregate these must number thousands of volumes. They cannot be denied to the public, but their use in their present condition may (and does) result in their absolute destruction, or the loss of essential portions, necessitating the replacement of the entire volume. Some cannot be replaced; others could be replaced only at great cost; none could be replaced as cheaply as they could be rebound. To neglect them now because of the expense of rebinding is deliberately to project the far greater expense of repurchase.

With its present force and equipment the Library Bindery is so little able to keep up with the current work assigned to it that no given volume can be depended upon to come through in less than three months (four weeks, rather, being a proper maximum). With its present appropriations the Library cannot afford to place out to be done by contract more than the books of the Branch and old Lower Hall collections, representing the current wear upon the more popular departments of literature.

The great accumulation, therefore, representing the arrearage of past years, can be provided for only by some extra provision; and the character of the work is such that the expedient provision would be to enlarge the force, equipment, and resources of the Library Bindery.

This need was called to the attention of the city government in your message transmitting your estimates for the coming year, "a special expenditure of at least \$30,000" being stated as necessary on this account alone. The estimates themselves assumed that of this amount at least \$10,000 should be applied in 1899.

The appropriation granted does not, of course, cover this item.

PRINTING.

The output of the Printing Department still includes all the printed work of the Library except the Annual Report. The figures of output during 1898 of the leading items may be summarized as follows:

Cards for the Card Catalogues — Central Library: 18,114 titles, as against about 15,000 in 1897. The number of *cards* may be judged from the fact that 120,903 have been inserted in the catalogues, as against 93,783 in 1897.

Cards for the catalogues at the Branches, 544 titles.

Stationery, Forms, etc.: currently consumed stocks of all kinds, 521,539 pieces (363,507 in 1897).

Call slips (of six kinds), 2,222,514 pieces.

Placards, 2,014 (1,394 in 1897).

Books and pamphlets to the number of 27, embracing 846 pages, in editions aggregating 129,250 copies. (For a particular list of these see under "Publications," *infra*.)

Service.—The force of the department remains as last year.

Plant.—"In the main the mechanical equipment of the department remains unchanged. During the summer the room was substantially floored with hard pine (upon concrete foundation) to protect the machinery from the injurious dust arising from the former cement floor. Upon the reërection of the plant, which was moved to permit of this, each machine not already so equipped was fitted with an independent electric motor. This change has proved beneficial in preventing the mutual interference of the different machines, which had before been experienced. The necessary gas and electric connections were laid below the new floor, and so arranged as to allow of addition to the plant of a third linotype. The room has been connected with the melting furnace in the basement by a hand-hoist. A similar hoist is needed to connect it with the stock-room in the staircase hall above."

The addition to the force of a second "feeder" and a third linotype operator and to the plant of a third linotype machine will deserve early consideration. One of the present machines having to be devoted to special work, the remaining one does not suffice for the card catalogue work; and the titles for the catalogue are delayed beyond the time when the new books should and may be ready for the public.

In the meantime the estimates for 1899 provided for the addition to the present machines of certain recent devices which would increase their range, flexibility and output. But the appropriation granted may not admit of the purchase of these.

CATALOGUING.

I shall offer to be printed as a supplement to this report two special reports compiled by the Chief of the Catalogue Department at request: one a memorandum concerning the genesis and scope of the general Card Catalogue of the Library, the other a memorandum concerning the practicability of a catalogue in book form of the entire library. The latter was suggested by a passage in the report of the Examining Committee of last year urging the advantages of such a catalogue. As such a recommendation is apt to recur from time to time, a somewhat detailed statement of the elements involved in such an undertaking has been thought advisable.

I condense here the report of the chief cataloguing undertakings of the past year.

Number of volumes and parts of volumes catalogued . . . 47,615

Divided as follows :

Additions to the Central Library . . .	29,271	
Recatalogued in revision work . . .	9,070	
Continuations of serials . . .	3,358	
Catalogued for branch libraries . . .	5,916	
		47,615
Author titles prepared for the above . . .	32,609	
Cards placed in the various catalogues, 1898 (exclusive of branches) . . .	120,903	
1897 (including branches for three months) . . .	93,783	
1896 (including branches) . . .	74,979	
1895 " " . . .	82,993	

In addition to the work on the card catalogues the time of the department is, of course, occupied largely with the preparation of material for the Bulletins, and Special Bibliographical lists issued by the Library. Of such undertakings mentioned in last year's report the following have been carried forward into 1898: The Select List of Books on Social Reform; the Bibliography of the Geographical Anthropology of Europe; the List of Pictures and Plans of Library Buildings, and the List of Historical Fiction. The status of the latter list is as follows: America, and Europe (excepting Rome, Italy and Greece) are in type (225 pages) in stereotype plates (having appeared in sections in the Quarterly Bulletins). The titles for Rome, Italy, Greece, Asia, Africa, Australasia and the Hawaiian Islands are prepared and ready for final revision. (An author index for America, Great Britain and Spain, and a Subject Index for America and a part of England are prepared, in manuscript.) The remainder, which includes the Jews and the Bible, is partly finished.

The list should be completed and (if the funds permit) printed, during the coming year.

Besides the work to be inferred from the list of publications below, the Catalogue Department has prepared or assisted in the preparation of: A new edition of the Selected List of Books for Younger Readers ("Y List"); a Bibliography of the Town of Boston (begun in the February, 1898, Bulletin); List of Scandinavian Literature (Bulletin); List of Polish Literature (Bulletin); Memorandum (by Mr. Murdoch) as to the Geographical Material in the Library (Bulletin); a brief list of books upon the Philippines, Cuba and the West Indies; reference lists to be used in connection with the Municipal Free Lecture Courses ("Imperialism,"

etc.), and others, with the lectures on art given by the Supervisor of Drawing in the Public Schools, these latter lists being printed by the Supervisor with the syllabus of the course. The department was utilized also in the preparation of the catalogue of the Library of the Massachusetts Hospital Ship "Bay State," the contribution to which by the Public Library (irrespective of some contributions of money by individual employees) consisted in the selection and purchase of the books, their preparation for use, including shelf lists, and the preparation and printing of the catalogue.

The Catalogue Department has continued its work upon the Maps and the Allen A. Brown Collection of Music, and the transcript of titles of scientific literature in adjacent libraries; and has borne its share in the Co-operative Index of Current Scientific serials, mention of which was made on page 33 of my last report.

The Custodian of Bates Hall had, just prior to his death, nearly completed a revised edition, covering over 4,000 titles, of the Genealogies and Town Histories in the Library.

PUBLICATIONS.

The publications issued during the year, as tabulated by the editor, Mr. Swift, are as follows:

	Date of Publication.	Pages.	Edition.	Price.
Annual List . . .	January, 1, 1899,	176	5,000	.05
Four Great Documents (Chamberlain) . . .	May, 1898,	56	2,000	Free.
Branch Finding List, . . .	May, 1898,	16	5,000	"
Galatea Catalogue . . .	June, 1898,	40	1,064	.15
Social Reform . . .	July, 1898,	72	1,500	.05
Y List (new edition), . . .	July, 1898,	68	8,000	.01
Codman Collection (Landscape Architecture.) List on Trees and Forestry, . . .	January, 1899,	32	500	.10
Monthly Bulletins: 1st of each month.				
March, 1898		56	7,500	Free.
April, 1898		24	"	"
May, 1898		56	"	"
June, 1898		56	"	"
July, 1898		28	"	"
August, 1898		28	"	"
September, 1898		24	"	"
October, 1898		32	"	"
November, 1898		36	"	"
December, 1898		24	"	"
January, 1899		28	"	"
February, 1899		36	"	"

The character and scope of the publications of the year is perhaps sufficiently to be inferred from their titles. So far as they indicate a present policy the policy may be summarized as follows:

1. To place before the public a description sufficiently full for identification, not exhaustive to the point of tediousness, of the books *newly added* to the various departments of the Library. To do this at short intervals, in a form reducing cost to a minimum. (The Monthly Bulletins of accessions to the Central Library; the Finding Lists of accessions to the Branches. *Free*.)
2. At intervals to regroup such information so as to compact the sources of information covering longer periods. (The Annual List — a consolidation, without recomposition, of the Monthly Bulletins of the preceding twelve-month.)
3. As occasion may suggest, to exhibit the resources of the Library in an entire department of literature, or at least its resources upon a particular topic; but with caution to avoid such elaboration as might delay the publication of the list beyond the useful occasion, or put its cost beyond the ordinary reach, or bury the titles of use to the general reader beneath those of interest only to the specialist. (Select List of Books upon Social Reform; Trees and Forestry; Philippines, Cuba and Porto Rico; Art Topics.) Such aids need not always consist of lists of books; they may often advantageously take the form of a statement suggesting lines or methods of research. (Memorandum upon Geographical Material.)
4. (More rarely) to issue a real Bibliography, thorough and scholarly, of a subject peculiarly of interest to scholars. Especially to undertake such in case (1) the co-operation of some specialist may be secured in the "evaluation" of the material and (2) the department of literature is one in which the Library is strong or takes this occasion to become so; the bibliography becoming thus a subject catalogue. (Bibliography of the Geographical Anthropology of Europe — made up of material contributed by Prof. Wm. Z. Ripley, and reduced to bibliography form and specific application by the Library, and printed and to be published by it.)
- (5.) As opportunity may occur to publish the catalogue of some special collection which has recently come to the Library by gift. (The Galatea; the Codman Memorial Collection.) This may well be justified even if the collection be not integral as to subject.

It is to be noticed that in the foregoing list one class of publishing enterprise not uncommon, nor untried in this

Library in former years, fails to be represented; the reproduction, in fac-simile or otherwise, of unique manuscript material of which the Library may have become the owner. Whether and how far it is the duty of the Library to aid scholarship by the publication of such,—how far its publication at all is expedient,—whether the Library should itself undertake such publication or simply encourage outsiders to undertake it; these are questions of policy that may necessitate careful deliberation and comparison of experience.

REGISTRATION.

Statistics of registration form, as usual, Appendix VI. of this report. As last year, the tables show not merely the number of card holders in gross, but their classification by sex, occupation and district of residence, and an estimate of the percentage of card holders in each ward of the city to the total population of such ward.

The interest of such statistics is as by comparison they may form an index to the existing relations of the public with the Library and to the influence upon these of certain forces.

In the aggregate the number of card holders (64,973 on February 1, 1898, 72,005 on January 31, 1899) has increased during the year by 7,032, or $10\frac{8}{10}$ per cent. The proportion of existing card holders to the *total* population of the city (including minors below 12 years of age not entitled to cards) 13 per cent. on February 1, 1898, is now $14\frac{4.9}{10}$ per cent.

As will be seen by the tables, the increase has been distributed pretty evenly over the city, except that it has been (proportionally) nearly three times as great in Ward 10 as in any other ward.

The classification of the card holders shows a fairly even division by sex. This is usual in the United States, but not so abroad. At Birmingham in 1895–96 the number of cards issued to borrowers was in the proportion of 32 males to 12 females; in 1896–97 as 28 to 12.

The classification by occupation reveals only 702 card holders who have described themselves as “laborers.” This is somewhat curiously in contrast with the considerable known use by this class of the reading-rooms at the Central Library and Branches. It represents, however, what I fancy to be a common experience in public libraries, both here and abroad. At Liverpool in 1897, for instance, in a total of 24,353 card holders in the Public Library, only 322 were

classified as "labourers." The adult laborer is rendered shy by conscious clumsiness. He overcomes his diffidence so far as to frequent the reading-rooms of a public library (if inviting and informal); but he shrinks from the formalities and betrayals incident to application for books for use at home. He reads many library books at home, however, or hears them read; for sometimes his wife holds a card, and commonly his son or daughter does. The books that interest his children are apt to interest him—for though of unequal ages, the child and the father of the laboring classes in America are by no means necessarily far apart in their capacity of appreciation. In planning a children's department of a public library one of the contingencies to be foreseen is, therefore, that any particular book may reach beyond the child to an adult.

An essential difficulty in the comparison of statistics of card holders in different libraries is caused by the difference in the registration period. Inquiry has shown that very few libraries can state with precision the number of "active cards outstanding."

The system now in operation here considers this statistic of essential importance. The registration period is now to coincide with the period of life of a card. A new registration will begin February 1, 1899; and at every second year thereafter either a new registration or a new numerical series.

USE OF THE LIBRARY.

I. — Reference Use.

I propose to append as supplements to this report statements somewhat full of the work or of certain of the aspects of the work of three particular departments (the Special Libraries, the Children's, and the newly organized Statistical Department). The reference work of the Library in general does not seem to have varied from that of last year sufficiently to require extensive mention.

Special Libraries.—The collections now grouped and administered under this title comprise now: The Fine Arts, the Industrial Arts and Music, the Maps, the Adams, Artz, Barton, Bowditch, Codman, Galatea, Gilbert, Hunt, Lewis, Prince, with other early Americana, Thayer, Ticknor, Twentieth Regiment (military alcove), Whitman—in the aggregate about 69,000 volumes. The public documents still hold place on this floor, but their custody has been transferred to the Statistical Department under Mr. Ford.

The activity of the Fine Arts Collection has continued incessant; and it is upon this division of the work of his department that I shall quote at length from the report of the custodian.

Appended to his report is a list of the artists at present represented in the collection of photographs; a list of the books (146 volumes) containing elaborate plates whose contents have been indexed on cards, so as to become almost as accessible as the individual photographs; and the scheme adopted for the classification of the typical examples (in plates) of the fine arts, architectural detail and of the industrial arts which have been secured in part by the dissection of certain serials. The main purpose of the collection last named is to offer to the actual worker in the arts and crafts practical suggestion from historical example.

These appendices I omit here. They will be included with other material in a special publication which will form a hand-book to the Fine Arts Collection in the Library and an aid to its use.

This is a library and not an art museum. The illustrations which it may supply of the various arts do not pretend in themselves to be works of art. The most of the photographs, for instance, are but small silver prints, not the large carbons which alone could meet the requirement of an art museum. Its purpose in its plates and photographs is more particularly to furnish an *index* to the arts — an index suggestive to the eye but not necessarily satisfying. It seeks to cover the largest possible field. For this reason, the individual item must cost little. It desires to offer the material to be handled freely and informally in connection with all sorts of inquiry from people not trained to care or dexterity in its use, and even to extend its use outside the Library building. For these reasons each specimen should be small in dimension, portable, and replaceable at small expense. For such service, therefore, not merely silver prints, but half-tone and other process reproductions may be and are utilized.

As will be seen from the report of the Chief of the Department, these photographs and plates are being used to an increasing extent by classes and schools, and for display (in subject groups) in the outlying departments of the Library. The demand for such use is eager. At present it can be met only meagrely, because, although the collection is nominally large, any one subject is perhaps found but once in it. With funds with which to multiply *copies*, portfolios of these photographs and prints (in subject groups) might be circulated throughout the city, in the Branch libraries, in public

institutions, in the schools, public and private, at the meeting places of study clubs, and at lecture halls, in connection with lectures having educational purpose. A few hundreds of dollars would accomplish much; a few thousand would enable us to create a *system*, secondary only in volume to the work of the books, and auxiliary to it in service.

Children's Department. — The addition to the space at the Central Library hitherto available for this department, of the large adjacent room formerly occupied by the patent collection, will furnish opportunity for a service as yet not satisfactorily accomplished — that in aid of the children's work at the schools. For this reason, I have asked the chief of the department to incorporate in her report a somewhat full statement as to the relations existing between the Library and the work of the schools; and it is this section of her report which I select to quote as a supplement to mine.

The Department of Documents and Statistics. — In June last the American Statistical Association turned over to us the collection of books, pamphlets and serials which it had accumulated by gift, purchase and exchange, and which formed its "library." The collection as a whole numbered about 5,000 books and pamphlets. Of these a large part duplicates material already here; but this will be available for exchange and thus finally represent an accession. Future acquisitions by the Association are likewise to be turned over to us, so that the collection will continue to have the benefit of the purchases of the Association and of its exchange list. As our custodian of the collection is corresponding secretary of the Association, and thus entitled to use its name and prestige in application for material, the future accessions are likely to be important.

The material of statistics (vital, economic, political, social and industrial) is of course largely in documents. A statistical department, therefore, naturally includes the important public documents in the Library. But if it is to be set off as a department integral in itself, a department equipped for seminar work, for instance, it must include as well much sociological material of a miscellaneous character.

Such a department had not existed in this Library, nor had the Library paralleled in the domain of economics the work for which it had gained reputation in history, general literature and the arts. Its collection of public documents, though uneven and with many deficiencies, is, nevertheless, a notable one, and with effort might be made a full one; the miscellaneous material which it possesses in the general domain of economics is sufficient to justify an expenditure

which will render it reasonably complete, and the acquisition of the library and of the future exchanges of the American Statistical Association offered a special opportunity and occasion.

It was accordingly decided to organize this new department, which, although for brevity entitled the "Statistical," has, in fact, the custody of the documents also, and is to bring into useful relation with this material the miscellaneous literature of economics and of political and social science. Its charge will be to endeavor, by correspondence and otherwise, to perfect the collections themselves; to classify the material with reference to the convenience of the particular constituency which is to use it (ignoring, if necessary, any and all schemes of arrangement, notation and cataloguing existing in other departments), and to administer it in the aid of inquiry. The department is not to compile statistics. Its function is to guide in the use of them. It must know the sources, and it must know them *discriminatingly*. In perhaps no department of literature is the untrained inquirer more helpless. The facts are submerged in documents vast in dimension and forbidding in aspect. The practice of libraries seldom extends to an analysis in the catalogues of the main contents, and the indices are apt to be only to single volumes, and on no single scale of proportion. Such facts as he finds may after all be no more than incompetent inferences from insufficient data, or only partial, or later superseded.

In any reference department of a library a very small proportion of the inquiry is for a given book; the most of it is for the best material upon a given subject. But a small proportion of the inquirers are experts in the subject; a smaller proportion still are experts in the use of the Library. If familiar with the language of the subject they are still unfamiliar with the language of the catalogues and other bibliographic aids. Their demands must be translated; and they may be translated adequately only by one who knows both languages, — who has been a practical expert in the subject and has become an expert in the mechanism of the library.

If this is so in general, it must particularly be so in a department such as statistics, where a given subject may be approached from so many different points of view, where pretence is easy and voluble and carries no ear marks to distinguish it from real authority, and where the apparent absence of technicality in the vernacular is itself a peril.

The foregoing considerations explain sufficiently the desire of the Library to place in charge of this department a practical

statistician ; and its gratification that there could be secured for its organization and present conduct one of the first of living statisticians. Mr. Ford coming to the Library after his experience as Chief of the Bureau of Statistics at Washington, brought also a useful knowledge of the most effective methods of obtaining the material itself, requiring familiarity with official usage and not merely patient, but dexterous application, supported by precedents.

Mr. Ford entered the service of the Library on July 15th. His work has, therefore, covered less than seven months. I have, however, requested him to include in his report a brief statement as to the proper scope and functions of a department such as this. This report I append as a supplement to mine.

II. — *Home Use.*

Appendix VII. gives the number of volumes circulated for home use during the past year from each department of the Library, and compares this with such circulation for the year 1897.

The reduction in the number of new books (especially of lighter literature) purchased in 1898, the inconvenience of application at the Central Library during the several months of the alterations (when, though the issue continued it was much impeded and delays were excessive) would have tended to reduce the circulation. In certain departments it was actually, and in others relatively, smaller than in 1897. In the aggregate, however, it was greater than in 1897, but not by an increase proportional to that of 1897 over 1896.

HOME USE.	1897.	1898.	Gain. 1898.
Central Library (including Central Library books issued through branches and stations)	388,489	422,849	34,360
Branches and Stations (di- rect issue)	811,169	822,993	11,824
	1,199,658	1,245,842	46,184

The insertion of card pockets in the books circulated for home use was begun during the past season. It may lead ultimately to a change in the charging system to the advantage both of the borrower and of the record.

The period during which the penalty on books over retained was allowed to run had been three months. An examination into the usage of other libraries showed that this

period was exceptional in length; the amount of the penalty appeared to operate unduly against the poorer class of readers and in being too great to be collected, to operate also to the disadvantage of the Library. On April 29th the period was reduced from three months to four weeks. The accumulated penalties (fines and messenger notices) at the end of the former period amounted on any given book to \$3.33; at the end of the latter to \$1.09; the cost of the book (if not finally returned) being added in either case.

BRANCHES AND STATIONS.

Under present conditions and without special expenditure the development of the outlying departments of the Library can be but gradual and partial. There is none the less reason for applying effort at improvement in the many details that may be improved without great outlay. If, therefore, the report of the Supervisor is chiefly a recital of petty changes, — a bit of plumbing here, a new fixture there, — a few score more books on open shelves, — an additional attendant, an enlargement of hours — it is to be remembered that sweeping changes not being at present possible, it is only upon these petty items that zeal for improvement may be expended.

The regrading of the Custodians of the Branches effected at the close of the year implies a higher recognition of their present responsibilities and an additional requirement.

I have felt obliged to omit the greater portion of the Supervisor's report, and shall append only a condensation of the statistics and certain sections which deal with work of larger aspect.

It will be noted that Mr. Hiller C. Wellman did not retire from the Supervisorship until May last; so that the responsibility of the present Supervisor, Mr. Ward, covers but a fraction of the Library year.

The most significant of the undertakings of the year has been the reclassification of the books upon a single system, with relative (instead of fixed) location, and identical notation; and the issue of a Finding List of recent accessions classified, located and numbered on this system, so that any copy of the list is equally a catalogue of these titles at any one of the ten branches. The work of reclassification is but begun. Hand in hand with it goes the work of weeding out the old or unserviceable books and of supplying fresh ones.

Assume the branches to be completely reorganized in this way, — their collections reduced to lowest terms and then

rebuilt to a common standard, classified alike and catalogued in common: and the basis will have been laid for a future development which may be simple, uniform and economical.

SERVICE.

The Library has suffered serious loss by death. Most serious indeed was the loss of Arthur Mason Knapp, for twenty-four years in its service, and for the last twenty years its chief reference librarian as Custodian of Bates Hall. Mr. Knapp's accumulated experience in the work of this position, to which he devoted himself with absolute concentration, stood for an asset of exceeding value. Rather than minute here too briefly the record of his career and service, I append to be printed the notice published in the Bulletin after his death, and passages from the address of the Rev. Dr. James De Normandie (who as a member of the Library Board spoke with particular knowledge) at the funeral services.

The war took from the Library two employees, of whom one is still in the field, the other — Michael Francis Leonard — died in the hospital on his return from Santiago.

Among the resignations has been that of Hiller C. Wellman, Supervisor of Branches. Mr. Wellman came to this position from the Athenæum Library in December, 1896; he left it to take the office of Librarian of the Brookline Public Library in May, 1898. In the meantime he had devoted active, earnest and intelligent service to the reorganization of the outlying library system.

The accessions to the service have brought notable capacity. Mr. Oscar A. Bierstadt,¹ who comes to take the place of Mr. Knapp as Custodian of Bates Hall, brings an experience of more than twenty years in the Astor Library, the latter part of which stood as an experience most nearly akin to that of Mr. Knapp, in a library most nearly akin to the Boston Public Library (in this department).

Mr. Langdon L. Ward, who succeeded Mr. Wellman as Supervisor of Branches, was not directly imported into that position, but was promoted to it because of work (in a subordinate department of the Branch system) so excellent as, with other obvious qualifications, to promise success in administering larger interests.

The acquisition of Mr. Worthington C. Ford for the organization of the Statistical Department has already been commented upon. In addition to his special knowledge in the

¹ Mr. Bierstadt does not begin his duties until February 1, 1899.

domain of statistics, finance and economic science generally, his knowledge of the sources of American history is of value to the Library in its purchases of Americana.

In the ordinary service the usual number of changes has occurred. The Library has lost by death or resignation in all nineteen persons: it has acquired in all thirty-four.¹ The latter figure includes all persons who have entered the service whether or not continued permanently. Of these thirty were in office at the end of the year.

Examinations.—Five general and ten special examinations were held during the year. Of the general two were for Grade B, one for Grade C, and two for Grade E. Of the special, five were of employees qualifying for promotion (to Grade B special, one; Grade C special, two; Grade C, one; Grade E, one); the remaining five were of outside applicants (to fill vacancies for which the lists returned by the general examinations did not seem adequately to provide). Of these latter special examinations one was for Grade B; three were for D special; one for E.

In all 236 papers were received and considered—of which 67 were from male applicants, 169 from female. Of the thirty-four persons taken into the service twenty-three were male, eleven female, and the assignment as follows:

Grades.	Central.	Branches.
B	3	1
D Special		4
D	5	3
E	5	1
Ungraded ¹	8	4
	—	—
	21	13

It would be ungracious to make no mention of the volunteer aid that is constantly offered to the Library and sometimes accepted. The most of it desires to be anonymous, and a great deal of it is necessarily so. During the past three years one service in particular has been rendered by outsiders, which has been of very great usefulness. A committee numbering (at any one time) from fifteen to twenty persons (all residents of the city, and thus far all women) has undertaken to read every work of current fiction (in English), under consideration for purchase, and to report to the Librarian in writing certain information regarding it. The information requested is in chief: is the book suitable for child, or for adult? is it historical, or purely romantic? narrative, or

¹ Including appointments to positions not subject to formal examination (Supervisor of Branches, Custodian of Bates Hall, etc.). Also janitorial appointments.

does it deal with some contemporary social problem? if historical, what period of history does it depict? its merits and defects: as to accuracy (if historical), temper (if touching social problems), apparent sincerity (if treating religious problems), morality and style; and an outline of the plot sufficient to render intelligible the information above described.

Every new work of fiction (in English) is read and thus reported upon independently by two persons; if their reports disagree, by a third. The labors of the Committee may be appreciated from the fact that during the past year (a normal one) 548 books were read by it, and reported upon in writing.

These reports are of the greatest service to the administration of the Library, and have been made use of by other institutions or boards having the responsibility of selecting from the mass of current publications, but unable to examine each book in detail. And the labors of the Committee would have received appreciative mention before this, but that its function is so liable to be misunderstood.

It is *not* — an outside body, without official responsibility — substituted for the administration. It does not *select* books for the Library; it merely furnishes information by which the books may more efficiently be selected by the Librarian and Trustees. It indicates also an opinion whether, on the whole, the book is worthy. But this opinion does not finally control. It is an element in the decision, but no more. And the final decision, for acceptance or rejection, frequently runs counter to it.

The Committee is not a body of experts; it is composed of persons selected at large, sufficiently numerous to represent at any one time different points of view. Its *personnel* changes constantly, in order that the variety of view may be still greater, and that merely methodical and routine judgment may be avoided. The purpose (so far as it concerns the mere opinion desired) being to secure the average instinctive judgment of the general public, the committee is not furnished by the administration with any standards of criticism; indeed, its requests for such standards have regularly been denied.

Of the 600 works of current English fiction received during the year, less than a third (with necessary duplication of copies) could be purchased. That of the 180 purchased last year it may be said that not one was placed on the shelves without having been read and reported upon by at least two persons, indicates a service by the Committee sufficiently deserving of gratitude. That to the selection of

these 180 titles out of the 548 the Committee contributed information of great usefulness, indicates a service of even larger measure. I feel that to the members of the Committee, and especially to its permanent chairman, Miss Mary Morison, an appreciation on the part of the Library is due which ought not further to be suppressed.

All the departments have been more or less embarrassed during the year by illness, and upon some has fallen the special strain incident to the structural alterations. This was, of course, heaviest upon the Issue Department, which was for a long period deprived of the full use of the pneumatic tubes and other apparatus, and cut off from its ordinary passageway to the stacks, and was obliged to carry the ordinary burden of work in a space contracted, noisy, draughty and dusty, and confused with carpenters, masons and painters. But there is no department at the Central Library which was not in some way or measure inconvenienced. The Ordering Department, for instance, was for weeks deprived of its room entirely, and crowded into a small, ill-lighted space in the Entresol. Even the Catalogue and Shelf Departments, though remote from the centre of operations, suffered much embarrassment during their course. The Shelf Department, for example, has had the special burden (in addition to its routine work) of moving and relocating (without the use of lifts) more than 300,000 volumes affected by the changes.

The strain (especially upon the attendants in the Issue Department) has been exceedingly severe. That they suffered from it I know. But so far as I know they did not (by a single peevish expression) let the public suffer from it. Not a single complaint came to me that the service was too arduous; not a suggestion that the work ought to be suspended even for a single day. I am, however, so wonted to this spirit of unselfish earnestness among the employees of the Library, and their eagerness to do all in their power to secure the best results, that it is only by an effort that I can regard or mention this recent manifestation of it as significant.

HERBERT PUTNAM,

Librarian.

FEBRUARY, 1, 1899.

SUPPLEMENTS TO THE REPORT OF THE
LIBRARIAN.

(A.)

MEMORANDUM AS TO THE GENERAL CARD CATALOGUE.

To the Librarian :

The Card Catalogue of the Boston Public Library was begun in 1871. At that time the titles of books under authors and subjects in the first Catalogue of Bates Hall (the Index, 1861) and its First Supplement (1866) and the Prince Catalogue were cut from those volumes, pasted on cards and made a part of the Public Card Catalogue. The Bulletins also, which contained the record of the additions to the Library, from September 1, 1867, to 1871, were treated in the same manner. The titles in the various Lists for the Lower Hall (now Stack 4) were made a part of the Public Card Catalogue for that collection.

From 1871 on, the printed titles of all books received by the Library (including the Ticknor collection) have been added day by day to the Card Catalogues. An exception was made in the case of the Barton collection, for three reasons: 1. The collection was kept by itself at a distance from Bates Hall, in a room where no attendant was stationed. 2. The works of great rarity and value in the collection it was thought best not to bring forward into prominence. Persons entitled to use them could find them through the catalogue printed in a volume. 3. On the other hand, the works of less value, such as modern editions of Shakespeare, were largely duplicated in the general collection, more easily attainable, and preferably to be used to the saving of the rarer editions.

THE OFFICERS' CATALOGUE.

The second Card Catalogue, kept in the Catalogue Room, from 1871 on, is in the main a duplicate of the one for the use of the public. Its basis was the collection of titles in manuscript for books received after the publication of the First Supplement to the Bates Hall Index, which titles it was

intended to use as printers' copy for a Second Supplement. These additions, so far as they covered newly-published books and others of especial interest, were printed in the Bulletins, and, as already stated, these selected printed titles were added to the Public Card Catalogue.

The Index, the Supplement and the Prince Catalogue were not cut and added to the Officers' Catalogue, because at that time it was thought that any information needed by the Library staff could be found readily in the catalogues in printed volumes.

It may be inferred that after the work mentioned on the Public Card Catalogue was finished, readers had at hand a fairly representative inventory of the books in this Library. This was the case so far as the titles of these books had been put into type. The Index and Supplement, however, did not contain the titles of all the books in the Library; pamphlets, for example, being generally omitted, and subject entries not being given in all cases.¹

It was found on using this new conglomerate catalogue that the titles in small type, cut from the printed catalogues, when placed in drawers under a wire were read with difficulty; they also suffered from wear and tear.

With the growth of the Library it was also found that the titles as hitherto printed were altogether too brief for usefulness, and that it would be necessary to recatalogue and reprint all that represented books received by this Library during the first twenty years of its existence.

It was decided also, for good reasons, to make the Public and Officers' Catalogue exactly alike, each ultimately to contain a record of all the books added to the Library from the beginning.

This work has gone on steadily for twenty-seven years, the cataloguing of former years being brought up to the greatly advanced present standard.

Since moving to the new building a triplicate Card Catalogue has been prepared for the books added to the collections in the Special Libraries' Department. From tests recently made, I think that only a comparatively small number of books in the Library (outside of the Barton collection) will fail to be found in some form in the Bates Hall Card Catalogue.

Respectfully submitted,

JAMES L. WHITNEY,

Chief Cataloguer.

¹ Reference is made to an article (B) which follows this memorandum.

(B.)

CONSIDERATIONS AS TO A PRINTED CATALOGUE
IN BOOK FORM.*To the Librarian :*

When the Boston Public Library first occupied the new building on Boylston street two independent libraries were established there: 1. The collection of popular books in the Lower Hall. 2. The more scholarly books in the Bates Hall. For the popular department a Finding List was printed in 1858, which has been followed by Class Lists, in many editions, down to a recent date. For the Bates Hall a List was published in 1861. The title in both was an "Index to the Catalogue," etc., as consisting of brief entries which pointed to a card catalogue, or the books themselves, for fuller particulars.

These Indexes, moreover, contained the titles of a selected portion only of the Library, but few pamphlets, for example, being included, unless written by Boston authors or relating to the affairs of Boston; while subject-entries were not given in many cases, particularly where a publication contained less than one hundred pages—a poor test, as was then allowed, of the value of any production, and particularly so in science.

A First Supplement to this Index, on a like plan, was published in 1866, and it was purposed to follow these Indexes with supplementary ones, to be gathered together at some future time, it was hoped, under one alphabet.

At this time the Library took a great stride forward, the annual additions, which for a few years had averaged 7,500 volumes, increasing to some 25,000 volumes, including special libraries, such as the Prince and Ticknor collections, which were given with the understanding that critical and scholarly catalogues be published.

Mr. Justin Winsor, soon after assuming the office of Superintendent, saw clearly that this great increase was "almost a portent of future unavailing efforts to keep up in print with the growth of the Library," and that it had become "a question of prime importance, with the future so promising for continued growth, whether some change in the method of presenting the record of our accessions to the public will not be absolutely forced upon us."¹

In the meantime, as the nearest approach possible to the catalogue desired, a Bulletin of new accessions was begun

¹ Annual report, 1871.

in 1867, which publication, with changes of form, has continued until the present time. To this, from time to time, have been added catalogues of special subjects in great number.

It is understood that the material supplementary to these catalogues in printed volumes, which was being collected in card form, was intended only for the use of the officers of the Library in preparing a new Index volume. Readers were obliged to examine many catalogues and bulletins, which numbered, in 1871, in both libraries, nearly thirty — a state of things which was felt to be intolerable.

At this time the foundations were laid of a Card Catalogue, intended, under author and subject, to give full entries for all the books in the Library. This involved not only the cataloguing of the new accessions to the Library, but also all the omitted material already alluded to, together with the re-cataloguing of some 175,000 volumes. This work of preparation and revision has gone on steadily since that time, its scope and methods broadening and ramifying with the growth and development of the Library. Since the establishment of the Card Catalogue it may be roughly estimated that 400,000 volumes, pamphlets and parts of volumes, newly added to the Central Library, have been catalogued, and, on an average, 12,000 volumes a year of older material have been revised and recatalogued.¹

A PRINTED VOLUME.

While this work has more than met the anticipations of its projectors and has proved in many respects an ideal catalogue, the question has been asked from time to time by those who have chafed under its requirements and limitations, whether it might not be possible to condense all this material into printed volumes, which could be consulted more readily and used outside the Library building.

To this question the reply of the Trustees has been that owing to the expense involved and to other grave considerations, they were not prepared to enter upon an undertaking so vast and of so uncertain an issue. At least, until the Library should be housed in a new building and all of the necessary changes of shelf-position and shelf-numbers had been made, a printed catalogue, even if possible, would be an unwise project.

Now that this transfer has been made and the changes mentioned are under way how does the case stand? What will the proposed catalogue involve?

¹ From 1882-1897, 191,472 volumes were recatalogued in the work of revision.

I. In the first place the work of revision must be pushed with vigor to the end, the cataloguers being called off from all other special work to receive aid in this undertaking from an extra force to be engaged from outside. The cards for every book must be copied in abbreviated form, compared with each other, and, if not already done, with the cards in the Public Catalogue, with the shelf-lists, and with the book itself, while the subject headings must be submitted to a rigid test as to their correctness and their indication of relationship to the headings of cognate subjects. The catalogue of a great library is a constant development; to its latest and highest requirements all the work of preceding years must be brought. Only when the work is perfected can it be given to the printer. The time needed for this cannot be estimated, but only guessed at from the experience of other large libraries which have printed their catalogues.

II. Supposing that this revision is finished and the card catalogue as it stands now is ready to print, what then?

On June 25, 1898, the Card Catalogue measured 12,523 inches, linear measurement through the thickness of the stock. Reckoning eighty cards to an inch these cards number 1,001,840. Roughly estimated, from numerous tests made, nine-tenths of these cards contain one title each, and one-tenth two or more titles. It might be said that there are 1,200,000 titles (author and subject) in the Public Card Catalogues in the Bates Hall and Delivery Room. This leaves out of account many of the titles in the Ticknor and Barton Catalogues, which it would be desirable to include in condensed form in a general catalogue of this Library.

An estimate may be made in another way. There were in the Central Library, exclusive of the Duplicate Room, on July 1, 1898, about 524,000 volumes, or, deducting special collections, say 500,000 volumes. Reckoning two and one-half entries for each book (an accepted estimate),¹ the number of titles to be printed would be 1,250,000.²

III. The question now arises shall the proposed catalogue be kept up to date; that is, shall the titles of books received while the work is in progress be added, or shall it include only what was in the Library at the time of beginning the work?

For the past seven years the cards placed in the public catalogues in Bates Hall and the Delivery Room have

¹ The Dictionary Catalogue of the Boston Athenæum for the period from 1872-1894 covers 80,000 bound volumes and 5,000 pamphlets, and is estimated to contain 291,840 cards, or nearly three and one-half cards per title.

² In this estimate no account is taken of the number of duplicate copies on these cards, the number of volumes made up of many pamphlets, or the number of works in long sets.

averaged 44,857 a year, or about 150 a day. Since the preparation and printing of these titles in addition to those already in the Library would push forward the publication of the catalogue indefinitely, I will here make only estimates on the collection of books as it now stands.

TIME.

IV. Assuming that these 1,200,000 titles are ready for the printer, how much time will be needed to edit them through the press?

From an examination of numerous catalogues of this and other libraries, I judge that the number of titles to a page would average from forty to fifty, depending on the fulness of the titles given and the style of printing. Calling it the larger number, the catalogue would fill 24,000 pages; if the smaller, 30,000 pages.

The Boston Athenæum catalogue was printed at the rate of 1+ pages a working day; the catalogue of the Library of the Peabody Institute at the rate of less than two pages a day; the Index-Catalogue of the Library of the Surgeon-General's office, United States Army, at the rate of about three and one-third pages a day. Calling the rate of progress for the proposed catalogue five pages a day, the time needed would be in the one case sixteen years, and in the other twenty years.

The catalogue of the Boston Athenæum, work upon which was begun in 1856, was sent to the printer May, 1872. January of that year was taken as the limit beyond which no book should be added. On its completion, therefore, it did not contain the titles of books added to the library for the preceding ten years. To the Index-Catalogue of the library of the Surgeon-General's office, and to the catalogue of the Peabody Institute, the titles of books and articles received during the printing were added, except such as were included in the part of the alphabet already in type.

On the completion of the Index Catalogue enough material had collected in the letter A to fill 828 pages, while in the main work this letter occupied only 718 pages. In the Peabody Institute catalogue this letter occupies 236 pages in the supplement, and only 136 in the main work. This disproportion would doubtless disappear in the later letters of the alphabet, yet it shows that the titles left over on the completion of a catalogue may be as numerous when the work is delayed to insert matter received during its progress through the press as when, receiving no additions, it is put through more rapidly.

USE.

What will be the value and how great the use of a catalogue which does not contain the titles of books added for ten to twenty years previous to its issue?

On the completion of the Boston Athenæum catalogue I examined the books given to readers at the Boston Public Library for some days, and found that seven out of ten had been published less than ten years. Of course such a catalogue would have less and less use from year to year.¹

By recent tests made by Mr. Chevalier, of the Catalogue Department, it appears that of books taken for Home Use on given days 24 per cent. were published before 1883, while 19 per cent. bore date between 1883 and 1888, and 57 per cent. between 1888 and 1898; while of books taken for Hall Use, 37 per cent. were published before 1883, while 24 per cent. were issued between 1883 and 1888, and 39 per cent. between 1888 and 1898. On the completion of the proposed catalogue for this Library it probably would not contain one-fourth of the books called for by readers.

EXTENT.

An opinion as to the number of volumes required for a printed catalogue of this Library may be ventured, based on the experience of other libraries. Six years ago an estimate was made that the titles in the card catalogue of the Upper Hall of the old Library building would fill sixteen and one-half volumes of the size of the Barton catalogue (Miscellaneous part). This estimate apparently took no account of the titles which have long contents, or of the cases where more than one title is on a card, and in my opinion it falls far short of being correct.

The Boston Athenæum catalogue of 92,000 volumes and about 36,000 pamphlets is in five volumes with 3,400 pages. In the five volumes of the Peabody Institute Library the 5,000 pages catalogue a collection of perhaps 100,000 volumes. The Index-Catalogue at Washington in its sixteen volumes, or 16,000 pages, represents a collection somewhat larger, minutely analyzed.

The British Museum catalogue, with author entries only, which approaches completion, thus far fills about 110,000 columns (two to a page, folio size). These columns, if joined

¹ "While the use of the catalogue in print is vastly more convenient than the best in manuscript, and while our printed volumes may be of great advantage in other libraries, and to a few students who possess them, it is very apparent from observation that the great bulk of users of the Bates Hall are in search of the newer books, which cannot be found in the printed catalogues." — *J. Winsor: Superintendent's Report, 1872.*

to one another, would reach more than seventeen miles, — a vivid illustration of the proportions which the catalogue of our own Library will soon reach.

With its half a million volumes and many thousand pamphlets an estimate for the Boston Public Library of a catalogue in thirty volumes of a thousand pages each is probably a moderate one.

COST.

It would be difficult to estimate the cost of preparing a catalogue of this Library for the press and printing it. In 1881 the Examining Committee made a statement, based upon estimates furnished them, that the cost would be nearer \$200,000 than \$100,000. The Catalogue of the Boston Athenæum, in five volumes, is said to have cost nearly \$100,000.¹ Of the Index-Catalogue of the Library of the Surgeon-General's office one volume has been issued yearly at a cost for the printing and binding alone, and not including the cost of preparation, of \$12,000 a volume, or \$216,000 for the eighteen volumes (first and second series) so far issued, in an edition of 1,000 copies. For printing the Catalogue of the British Museum, which was begun January, 1881, an annual grant was assigned which has risen by gradual increments to £3,000 a year.²

SALE.

If a price be set upon the catalogue based upon its cost, or upon the charge for the catalogues of other libraries, but few copies would be sold. Even if a nominal price were named, judging from the experience of the Library, the sale would probably be quite limited.

SPECIAL LISTS.

As already stated, in place of a new general catalogue in a printed volume, the Bulletin was established, which gives ready access to the new additions to the Library.

Moreover, as any subject has come forward into prominence or general interest it has been made the occasion for preparing

¹ This estimate is only an approximate one. (See the reports of the Treasurer.) The Librarian has stated that the cost of printing, paper, binding, etc., was about \$20,000, and that for many years there were from two to eight persons preparing the manuscript for the printer. The compilation of this catalogue was attended with peculiar difficulties (see the Preface), and its cost was greater than might be expected in similar undertakings.

² For the British Museum catalogue the yearly subscription for the parts, which began to appear about 1881, is £3 10s. The selling price of the entire catalogue will be £84. The price of the five volumes of the Peabody Institute catalogue is \$37, and \$11.50 for volumes 1-3 of the second series. The Boston Athenæum catalogue is sold for five dollars a volume, and to libraries at twenty dollars for the entire work. About 350 copies have been sold. The price for the catalogue of the Library of the Surgeon-General's office is \$3.50 a volume; for that of the Bibliothèque Nationale, fifteen francs a volume.

a special catalogue, in which, with the aid offered by specialists, the titles of the most helpful and authoritative works have been gathered. As an example, there may be cited the list of books on social reform, published this year. Such lists as these, drawn from the general catalogue, when the interest of the public on any particular question or department of literature is ardent, are timely and of service, whereas such a topic in a general printed catalogue might at any given moment not have been reached or be a dozen years behind the time.¹

SUPPLEMENTS.

On the completion of this proposed catalogue a million cards will probably have accumulated, necessitating the preparation of the first of many supplements to follow. The Library would then be confronted with the state of things which led its first Superintendent, Mr. Jewett, to affirm that "Nothing short of what a Card Catalogue is in plan can ever be regarded as entirely satisfactory for a great public library,"² and his successor, Mr. Winsor, to agree with the view of European librarians that "printing in a large and rapidly growing library is impracticable."³

PRINTING.

Nothing has been said in regard to the printer's part in the proposed catalogue, for the reason that the other considerations adduced are the vital ones. With the addition of another press and linotype the proposed catalogue could be put in type to keep pace with the supply of matter furnished by the editors.

With the coming of the linotype there was a suggestion that the way might be open for a catalogue of the entire Library in printed volumes, and moreover that by holding the solid lines or "slugs," insertions might be made and the catalogue kept up to date.

In this Library the linotype has been tested in catalogue work to the following extent: In addition to the printing of the titles of accessions for the card catalogue and the special catalogues a Monthly Bulletin has been issued, and at the end of twenty months about two-thirds of this matter has been reprinted, with some changes, from the same slugs, as

¹The Austrian Library Association, at its meeting held on March 26, of this year, decided to abandon the plan for an Austrian General catalogue, owing to lack of adequate support, but in its place it voted to publish bulletins devoted to library matters. — *Library Journal*, September, 1898.

²Annual Report, 1861.

³Annual Report, 1872.

an Annual List.¹ Although this is an Author Catalogue, arranged simply by classes, and much less intricate than a Dictionary Catalogue of authors and subjects, many difficulties have been met with in its development. If the attempt should be made to unite the slugs for this Annual List with others for a two-year list or a five-year list, as has been proposed, these difficulties would multiply many fold. To mention one: to the labor of finding the slugs and rearranging them there would be added the constantly increasing necessity for a new grouping. It would probably be more economical to set up the whole list anew. For it is a settled principle that work ought to be perfected before it is sent to the printer; all changes and new arrangements after that are disastrous. The same principle holds good with the linotype. Editorial work must be done elsewhere than in the printer's office, or the linotype room.

With the linotype as up to this time developed, methods which hold good for printing such a publication as the Annual List would cease to be operative in the case of a larger and certainly of a much larger catalogue. The cost of arrangement and editing would be out of all proportion to the increase of titles.

The case as it stands is as stated. Should the linotype ever through the progress of invention overcome its present limitations and effect that which now seems impossible, no one will rejoice more than the maker of catalogues.

SUGGESTIONS.

The Examining Committee for 1886, impressed with the requirements of the Catalogue Department, suggested "that \$100,000 be secured by public grant, private subscription — or by all combined — the income of which should be exclusively devoted in perpetuity, to the Bates Hall Catalogue."

With this sum in hand, it would be worth while to consider whether, if it be impossible to make an elaborate author and subject catalogue, some quicker and less expensive substitute might not be found.

AUTHOR CATALOGUE.

I. An Author Catalogue, that is, one in which entries are given only under authors' names, and not, as in a Dictionary Catalogue, under subjects also, could be prepared with less delay and cost. That of the British Museum has been mentioned. The Bibliothèque Nationale has begun the publication of such a catalogue, of which the first volume

¹ This was followed by a second Annual List, January 1, 1899.

contains, in 565 pages, 11,067 titles, or about one-fourth of the titles of works of authors whose name begins with the letter A.¹

As to the value of an Author Catalogue it should be said that however the case may be in the Bibliothèque Nationale, or in a University Library, in the Boston Public Library an Author Catalogue would be of less value than one under subjects.

One comes to a library to learn one of two things: 1. Whether a certain book is there; or 2. What the library has on a given subject. The first point is settled by an Author Catalogue, and it is the only one settled except the question of the bibliographer, who wishes to learn the exact title of an out of the way book. An answer to the second question is found in a Subject Catalogue.

The scholar, familiar with literature, will seek what he needs in an Author Catalogue. Even here he will obtain more satisfactory results from the Card Catalogue of the Library than from its abbreviated reproduction in book form. The general inquirer, however, as a rule does not know the particular book required, and asks what books are in the Library under a given subject. This question cannot be answered by an Author Catalogue whether in book form or on cards.

The publication of an Author Catalogue for the benefit of all countries may perhaps be justified in the case of the British Museum and the Bibliothèque Nationale, as being national libraries and containing in the largest gatherings of books in the world an approach to a universal collection. The library on this side of the Atlantic most nearly approximating such a collection ought ultimately to be our own National Library. This institution receives copies of every book copyrighted in the United States. Even if it should not attempt to publish a complete catalogue of its collection it is conceivable that an Author Catalogue of at least this portion, representing a complete, authoritative description of all the issues of the American press, might be of sufficient service to bibliography to justify its expense.² It would have the advantage, which Trade Catalogues do not possess, of being a full, precise and scholarly description. Such a work, however, needs to be issued under the authority of one institution only. It does not need to be repeated by other libraries.

¹ The Introduction by M. Delisle is interesting, especially section 15. "*Raisons qui ont fait adopter l'ordre alphabétique pour le Catalogue.*"

² A Catalogue of Authors was begun by the Library of Congress in 1878, but it was continued only through the letter C. Its catalogue of the title entries of books and other articles entered in the office of the Register of Copyright is a publication in the direction indicated.

If each national library would at least undertake such a catalogue for the issues of the press of its country, the publications of the world would be economically recorded. But however proper a work like this might be for a national library, with a collection of copyright material presumably complete, and with the resources of a nation behind it, the Boston Public Library stands in a very different position. It is to an extent a scholars' library; it is also a popular library. It does not contain, and does not wish to contain, more than a fraction of the books published in this country. The bibliographical value of its catalogue in print, therefore, would be limited accordingly, while the material published abroad which it contains, being for the most part duplicated in the British Museum and the Bibliothèque Nationale together, is adequately recorded at their expense in their catalogues.

So much for the scholarly side, the bibliography pure and simple. For the popular service, the Monthly Bulletin and special lists, as they are issued from time to time, are adequate and more to the purpose.

CLASSED LISTS.

II. The titles under authors might be grouped under classes, as in our Monthly Bulletin and Annual List. Such a list of all the books of this Library, however, would need a classification so extensive and indexes so minute that the labor might quite equal that of finishing the preparation and the printing of our Dictionary Catalogue of authors and subjects. The Annual List is only a selection from the Monthly Bulletins, which are themselves only a partial record of the books currently received. From the labor expended on this list (which is without indexes) one can imagine the time needed for the preparation of an indexed list of all the books received by this Library for nearly fifty years.

SELECTED SUBJECTS.

III. Some years ago, in the Boylston street building, when the pressure for space for the Card Catalogue was a matter of concern, a plan was formed to take out certain sections and print them separately. While the work done in this direction has great value, as approaching the subjects treated from a different point of view from our Dictionary Catalogue, and, while it also supplements that work, the Library has never seen the wisdom of substituting these lists for the fuller entries in the Card Catalogue, or breaking up the completeness and continuity of that great work. Still, some such plan may be forced upon us in the future.

CONCLUSION.

I have presented the question of a catalogue in a printed volume for the Boston Public Library succinctly, and I trust fairly, for consideration.

I think that such an undertaking would be unwise. The decision of twenty-six years ago was based on reasons which have gathered strength with the passing of time.

Respectfully submitted,

JAMES L. WHITNEY,

Chief Cataloguer.

POSTSCRIPT.

The following statements in the "Quarterly Review" for October, 1898, in regard to the Book Catalogue of the British Museum, supplement the information given in the preceding report. It is there stated that the complete catalogue will consist of about six hundred volumes, containing on an average, 250 columns each. During its progress through the press the accessions to the library have exceeded half a million titles, only a fraction of which will appear in this catalogue. The number of copies available is about 250, but of these less than one-third has passed into circulation, and even of that number about one-half has been given gratuitously. A supplementary catalogue of accessions was printed, which a subscriber could obtain for £3 a year in addition to his subscription of £3, 10s., for the principal catalogue. But this Accessions Catalogue found scarcely any subscribers, and the issue has now been contracted within the narrowest possible limits. The writer adds "The present situation may be summed up in the statement that the Catalogue of the British Museum is almost unknown outside of the Reading Room; that its complete form is found in the Reading Room alone; and that the very few persons who have access to it beyond those precincts possess it in a form which is so incomplete as well-nigh to frustrate the chief reason of its existence."¹

In the magazine "Literature," for January 10, 1899, it is stated that the officials of the Bibliothèque Nationale have been compelled to cease printing their catalogue by reason of the great expense involved. When the work was undertaken it was estimated that the catalogue would occupy some eighty volumes. The first volume cost £1,600, so that the cost of the entire work might be £130,000.

¹ In a circular from the British Museum, dated April 15, 1899, the statement is made that a supplement will be published to include the titles, not yet incorporated, of all works acquired since the commencement of the printing of the catalogue to the end of 1899.

(C.)

EXTRACT FROM THE REPORT OF THE SPECIAL
LIBRARIES, DEPARTMENT OF FINE ARTS.*To the Librarian :*

Five lectures were given during the year :

*In the Barton Library.***1898.**February 23. Mrs. Hannah Johnson Carter. On the Art of
Ancient Egypt.

March 1. Lecture on Egypt repeated.

*In the Fine Arts Room.*April 21. Prof. D. G. Lyon of Harvard College. Assyrian
art, life and history. Illustrated by the
stereopticon.November 30. Mrs. Marie Buckman, Secretary of the Egypt
Exploration Fund. Art of Ancient Egypt.**1899.**January 31. Mr. C. Howard Walker. Early Greek architect-
ure and ornament.

Photographs, etc., illustrating the lectures were supplied by the Library. The lecturer was secured in each case by the Unity Art Club. It is very desirable that the large Lecture Room be made available for these lectures, as neither the Barton Library nor the Fine Arts Room is adequate.

The collection of photographs now numbers 9,870, of process reproductions, 3,509. Of the photographs, 1,696 have been added during the year at an expense of \$739.63 for purchase, and \$447.68 for mounting. The process pictures are classified and catalogued. The work is continuing on the photographs, less than 25 per cent. of which remain to be taken in hand. There is no doubt that this collection of photographs has not only increased the usefulness of the Fine Arts Department, but has stimulated the study of art among various classes in the community.

The collection of topical examples of objects of industrial art, formed after the pattern of collections in the numerous industrial museums in Europe, with the aid of the information and material gathered by Mr. S. R. Köhler of the Museum of Fine Arts, has been placed in a suitable case, and the arrangement of the plates advances. The collection consists mainly of plates (each example on a single sheet) from periodicals, arranged broadly in classes, such as architectural detail, ornament, plastic arts, furniture, etc. As the collection develops I intend to subdivide by countries, styles, and periods.

The use of the Allen A. Brown Library has noticeably increased since a beginning was made in the printing of the catalogue. Nearly 8,000 cards are now printed, and copy is ready for the printer which represents at least 60,000 more. These it is desirable to hasten, if possible.

The catalogue of about 4,700 cards, covering analytical references to musical works, periodicals, etc., and biographies, has been added during the year. The collection consisting of magazine articles, newspaper clippings, etc., was made by Mr. Brown, and has been bound up in volumes, over fifty of which are now catalogued. By means of this catalogue, in which works of importance are indexed as they appear, current information may be found concerning modern music and musicians. Progress has been made as well in the collecting, arranging, and binding of the series of concert programmes of the Handel and Haydn, Philharmonic, Mendelssohn Quintette Club, Musical Fund, Academy of Music, and other musical and choral organizations in Boston during the past seventy years.

Through the generosity of Mr. Brown the resources of this collection are enlarged systematically by the addition of new publications in music and musical literature. The collection of works for orchestra in full score has been largely increased. Worthy of mention among the more important additions of the year is a collection of part-songs and larger works for whole chorus, bound in fifty-two volumes, and comprising more than 1,200 separate publications.

EXHIBITIONS IN THE FINE ARTS DEPARTMENT, CENTRAL LIBRARY.

1898.

Feb. 8-14	— Venetian school. Photo-			
	graphs			Barton Library.
Feb. 14-21	— German and Flemish school.			
	Photographs		“	“
Feb. 21-28	— Dutch school. Photographs,		“	“
Feb. 28-Mar. 7	— French school. Photo-			
	graphs			Fine Arts Room.
Mar. 7-14	— English and American			
	schools. Photographs .	“	“	“
Mar. 14-28	— School-room decoration.			
	Photographs	“	“	“

NOTE.—The above six exhibitions illustrated lectures by Mr. J. F. Hopkins to teachers of the public schools.

- Mar. 21-April 1 — Ancient Egypt. Photographs, colored plates, and books, to illustrate a lecture by Mrs. Hannah Johnson Carter . . . Barton Library.
- Mar. 2-20 — Washington portraits. Loaned by Mr. George R. Barrett . . . “ “
- Mar. 21-April 9 — Decorative paper covers. The Walter M. Rowlands collection, supplemented by contributions from other owners . . . “ “
- April 7-18 — Madonnas of the old and modern schools of painting and sculpture . . . Fine Arts Room.
- April 15-May 10 — Books and broadsides purchased at the Deane and Bancker sales . . . “ “ “
- April 18-May 3 — Assyrian art. Photographs, colored plates, and books, to illustrate a lecture by Prof. D. G. Lyon of Harvard College . . . “ “ “
- April 20 — Greek art. Photographs, etc., in connection with a conference and lecture on Greece, by the Unity Art Club of Dorchester . . . Barton Library.
- May 3-17 — Industrial arts. Recent accessions, plates, etc. . . Fine Arts Room.
- May 10-June 12 — Americus Vespucius. Books, maps, portraits, etc., in commemoration of the centenary . . . “ “ “
- May 17-June 6 — Memorial Day. War photographs, colored plates, battle flags, brigade flags of Massachusetts regiments in the battle of Gettysburg. Loaned by Mr. Charles B. Brooks . . . “ “ “
- June 6-July 12 — English cathedrals, abbeys, castles, university buildings, etc. Photographs . . . “ “ “
- June 12-July 8 — Battle of Bunker Hill. Maps, broadsides, documents, portraits, etc. . . “ “ “
- June 20-Aug. 1 — Edward Burne-Jones. Photographs of the artist's

	works, to commemorate his death on June 17 .	Fine Arts Room.
July 12-Aug. 1	— Japanese architecture and costume. Photographs .	“ “ “
July 12-Aug. 19	— Hawaiian Islands. Photographs, plates, maps, portraits, etc. Loaned by Hon. Gorham D. Gilman,	“ “ “
Aug. 1-19	— Recent municipal architecture of Boston. Plates .	“ “ “
Aug. 1-Oct. 3	— The typical American, male and female. Photographs of statues made from measurements by Dr. D. A. Sargent	“ “ “
Aug. 19-30	— “Galerie Amér. du Musée d'ethnographie du Trocadéro.” Plates. In connection with the convention of the American Association for the Advancement of Science .	“ “ “
Aug. 30-Oct. 3	— Constantinople; American mural decorations; mural decorations in the Panthéon, Paris. Photographs,	“ “ “
Sept. 2-8	— War with Spain. Pictures cut from periodicals, etc.,	“ “ “
Oct. 4-17	— Classic architecture in Italy. Photographs	“ “ “
Oct. 17-24	— Assyrian and Babylonian antiquities. Photographs. In connection with the history course in the Boston High schools	“ “ “
Oct. 24-Nov. 17	— Portraits from the historic schools of painting. Photographs	“ “ “
Oct. 26-Nov. 22	— P. Puvis de Chavannes. Died Oct. 24. Photographs of his work. Certain of them loaned by Mr. F. P. Vinton and Mr. A. H. Munsell .	“ “ “
Nov. 17-Dec. 5	— Ancient Egypt. Photographs and colored plates, to illustrate a lecture by Mrs. Marie Buckman .	“ “ “
Dec. 5-15	— English country churches. Half-tone pictures	“ “ “

Dec. 15-31	— French chateaux. Photo-			
	graphs			Fine Arts Room.
Dec. 19-31	— Madonnas. Photographs.			
Dec. 31-Jan. 10,				
1899.	— Paris and Versailles. Pho-			
	tographs	“	“	“
Dec. 31-Jan. 10,				
1899.	— Great façades of the world.			
	Photographs	“	“	“
1899.				
Jan. 14-26	— French cathedrals. Photo-			
	graphs	“	“	“
Jan. 27-Feb. 1	— Greek architecture and orna-			
	ment. Photographs and			
	colored plates, to illustrate			
	a lecture by Mr. C. Howard			
	Walker	“	“	“

EXHIBITIONS AT THE BRANCH LIBRARIES AND STATIONS.

Collections of process reproductions on the subjects in the following list were exhibited during the year in the ten Branch Libraries, and certain of them in Stations A, D, L, and S: Egypt, Greek sculpture, Rome and Pompeii, Italian architecture, Italian painting, Florentine school, early Renaissance painters, Perugino, Raphael, Michael Angelo, Titian, Madonnas, Venice, Renaissance architecture and sculpture, Spain, Spanish architecture, Northern architecture, French cathedrals, English cathedrals, English country churches, Rembrandt, Dutch school, Italian views, Germany, Holland, Belgium, School decoration, Civil War photographs, and others.

Respectfully submitted,

OTTO FLEISCHNER.

(D.)

REPORT OF CHIEF OF DEPARTMENT OF DOCUMENTS AND STATISTICS.

[LIBRARIAN'S NOTE. — As this department had been in existence only eight months, and, as its chief work had so far been an examination of the collections of the Library, the receipt and classification of material from the American Statistical Association, and the initiation of methods of exchange and solicitation, cataloguing, etc., it seemed best that the report submitted by the Chief should be a general statement of functions. The experience of the eight months had shown that his estimate of the character and probable large number of inquiries addressed to the department was likely to be justified in experience.]

To the Librarian:

I have the honor to submit a report from the Statistical Department of this Library. As it will cover an activity of

only six months, and applies to what is practically a new departure in library administration, the results of which are yet to be determined, it will necessarily be brief.

The general plan of this department was to constitute a working laboratory on social topics, where the expert, the student and the general reader might find the material they desire, and, if necessary, advice and guidance in the use of this material. The scheme must, therefore, cover two important divisions of each social question: the theory, as developed by the leading American and European writers; and the application, as recorded in the investigations of government bureaus, corporations, associated charities or individuals. If the entire range of sociology as now understood is to be adequately treated, the department must have collections on political economy in its widest sense, on political science both in theory and in history, and on statistics, which records and generalizes both economics and history.

The Public Library possesses large and valuable collections on economics and history, and an intelligent appreciation of this description of writings is clearly evidenced in the selection. Indeed, it is in some respects one of the best collections of its kind in this country, and it would be difficult to duplicate it within any reasonable time. This great and solid foundation is now being rapidly added to by the purchase of current works, and by securing such as are out of print with every opportunity offered.

As to the third division, statistics, which includes all forms of state activity, the principal subjects to be covered are:

Vital statistics.

Commercial statistics, which comprises the means or agencies of transportation.

Labor statistics, which cannot overlook the statistics of production, whether agricultural or industrial.

Financial statistics, and all questions of banking, currency and taxation.

State and private penal and charitable institutions.

It will be necessary to provide the material for a proper understanding of these subjects both in general and in detail. For the general, reference may be made to the condensed statements of economy issued by each of the leading countries in the form of handbooks or abstracts. I have received, in some cases, full sets of the statistical abstracts of the following countries: United States, United Kingdom, France, Germany, Italy, Belgium, Sweden, Finland, Switzerland, Netherlands, Japan and India. And even where a country is not named

in this list the most essential statistics as to commerce, population, railroads, telegraphs and finance, may be learned from some of the abstracts, like that for "foreign countries," issued by the British government.

These abstracts are, however, too condensed to serve the purposes of the special student, and a vast and ever increasing number of official reports must be obtained for his needs. In the number and scope of these reports no two countries agree. It is safe to say that every leading bureau in a governmental department prepares and prints an annual report, which is supplemented by special reports, and by the labors of legislative commissions. It is often not enough to have the report alone; the debates of the House to which it is submitted are useful or essential. In fact, there is hardly any limit to the issues of this description, and only unremitting vigilance will enable the Library to keep abreast with them in a manner that will satisfy the demands of its readers.

In planning to fulfil the high purposes you designed for this department I have laid down certain broad lines of action that may be briefly summarized:

1. All census returns, whether of the United States or of Asiatic countries, have been sought. Vital statistics have been more fully developed than any other branch of statistical science, and are more frequently called for.

2. In commerce the detailed annual returns of the four leading commercial and industrial nations of the world — the United States, the United Kingdom, France and Germany — hold the first place in importance. Almost as necessary are those of Russia, Japan, China and British India — covering the development of Asiatic trade, now so prominent among the world's problems. Canada and South America are of great interest commercially to the United States, and the trade of colonies and dependencies must prove suggestive in studying the future policy and growth in foreign trade of the United States. Even Africa, with its failures and successes in colonization, and its internal relations affecting the attitude of competing powers to one another, carries lessons that cannot be neglected. I have attempted to secure complete commercial returns of the principal nations, and am meeting with success.

This particular branch will attract, and is attracting the attention of commercial and manufacturing bodies in this region. It is to be regretted that full replies cannot be given to every question, but this regret will become less as the collection of commercial statistics increases. Much assistance towards completing the wants of the department could be

given by commercial bodies, were they to turn over to the Library any works on commerce received and not immediately needed by their own members. The process of collecting and completing this will necessarily be a slow one; but the commercial interests of the port are of such importance that no effort should be spared to keep the records of the world's commerce to date and as full as circumstances will permit.

3. The problems of labor have many phases, no one of which should be passed over lightly. I have recently segregated the reports of the State Bureaus of labor statistics, and of a total issue of more than 300 reports, this department possesses all but about thirty; and even these wants are being made good by way of gift and exchanges. In foreign countries labor is represented in nearly all administrations, and the reports of labor departments or bureaus in Great Britain, France, Germany, Italy and Austria are received in this Library. This promises to constitute one of the most valuable divisions of this department, because of the many questions of daily life or state relations discussed in these reports.

To cover only the state reports on labor would be to pass over one of the most vital aspects of the labor problem, that which is usually described as socialism, but which takes so many forms that no one term will cover them. I am making a specialty of the proceedings of labor congresses, of socialist periodicals, and even of anarchist issues, believing that the statement of grievances and formulation of reforms by the workmen themselves will be of future value in history and in economics.

4. The next subject is that of finance, and its importance cannot be exaggerated. At a time when all governments are facing deficient revenues and rapidly increasing demands on their treasuries, the discussion of taxation has come to the front and is exercising national as well as local taxing powers. The budgets of each great nation, and the legislative reports and debates on the budget propositions; the great financial institutions, state and private, and the movements in the leading money markets of the world find a place in this department for future reference. No questioner has been turned away unsatisfied in this line of inquiry, and yet much remains to be done towards obtaining the material that is pertinent and timely.

It will not be necessary to dwell upon the value of state and local reports on charities and correction. They record the results of an exercise of functions on the performance

of which the very existence of the state depends. Too close attention cannot be given to this diseased aspect of society, and I have sought for the best products of treatment of social ills at home and abroad.

In pursuing these objects correspondence has been opened with experts and societies in the United States and in foreign countries, with a view to securing early notice of what is published on the various matters falling within this department. The response has been gratifying, and is proving its utility daily. These connections have been facilitated by the deposit in the Public Library of the collections of the American Statistical Association.

The transfer of these collections was not completed until January of this year; but the books and pamphlets, numbering about 5,000, have been arranged, listed, and will be incorporated into the Library as rapidly as time will permit. While there will be some duplication, yet the two collections complement one another in a very satisfactory manner. The Public Library was strong on economic writings of a general character, but weak in the results of economics applied in the administration of government; the Statistical Association was strong on this practical side, but almost wanting in theoretical works. Its most remarkable feature was the series of issues of foreign governments, long since out of print and difficult to obtain. As an example of the disinterested zeal of one man — Dr. Edward Jarvis — the collection is notable; as a foundation on which to build for the future, it is a valuable accession to the Public Library.

Exchanges of duplicate material are now being made, and the Statistical Collection has been able thus to complete many of its deficiencies.

In recognition of this widening interest in public questions, and more especially in the foreign relations of the United States, the advantage of prompt service has been recognized. The best results will be attained by rather anticipating than following public inquiry. With this in view arrangements have been perfected by which the important state papers of the leading governments of Europe are sent to the Library as soon as published, thus saving six weeks or more in the transmitting, by obviating the delay of formal orders from this side. German, French, Belgian and English bills, reports and debates have been brought under this system, which will be extended to other countries having direct or indirect relations with the policy, foreign intercourse or commerce of the United States. With the short trial already made of this system the results have justified the course

taken, and must be better appreciated as the facilities offered to the public become better known. I may mention that the Library, through this means, received early copies of the Treaty (Spanish) papers, the British Blue Book and the French Yellow Book on the Fashoda incident, and the special Parliamentary reports on water gas, petroleum and local taxation, all of which were called for soon after receipt. And that the system must prove of advantage as the public becomes more familiar with the facilities offered is shown by the fact of inquiries being made for documents of foreign governments, a knowledge of which was gained through cable press notices. It was extremely gratifying to be able to promise the document "in a few days," a promise that was fulfilled through the careful attention of the foreign agents of the Library, acting under the general arrangement already described.

In the same line is the method adopted of giving notice to the public of the receipt of important or timely documents. I have been enabled to publish notices in the Library bulletin within ten days after the document listed has reached the Library, without interfering with the regular process of the catalogue department. I believe that so prompt notice cannot but be useful to the public.

This brings me to the relations such a department must bear to the general public. It is not to be denied that there has in late years been an increasing attention paid to economic and political studies. This attention has been made necessary by the ever increasing complexity of our social relations, as well among ourselves as with other peoples. The universities and high schools have special departments for teaching these questions, and the need of a special department in this Library, to contain the works necessary for applying, encouraging and continuing these studies, has been impressed upon the Trustees and Librarian. I need hardly enumerate the subjects lately coming before this city government for some settlement: the expenditures and revenues; the relations to the city of corporations using the streets; questions of public health and safety; and the proper statistical records of municipal activity. In the State, the problem of taxation is ever present, with its perplexing difficulties of assessments and valuation of real and personal property; while the many corporate and state institutions under its control, call for an intelligent regulation as well as a high degree of practical ability. In national affairs there are also matters of finance of extreme importance, and the increasing demands of government for power to enter upon new areas

of state action call for the highest exercise of the intelligence and practical faculties. To undertake to deal with such problems in ignorance is to invite disaster; and it is only the highest ability that can hope to master their intricacies and point out the proper solution.

To another rising study this department must give support and direction — I refer to the study of commercial geography. The mere boundaries of a country, the names of its capital and leading cities, rivers and mountains, convey no real meaning to the child's mind, and much less can they satisfy the more matured student. The climate and productions of the region, the mineral wealth and the products for home consumption or foreign trade, the manufacturing industries and the great commercial roads leading to or through it, the general habits of the people in food and clothing, and the form and supply of labor available — these are a few of the leading topics that present themselves in an attempt to gain even a superficial conception of what a country or a region implies. The prevailing feverish eagerness to penetrate into new and undescribed regions enforces such a study, and in the intense competition for colonial dependencies or protectorates, it will be the people having the most intelligent mastery of needs and resources that will win the highest rewards. In Africa, in Asia, and in South America, commerce is being pushed as never before, and vast territories, thought a short time since to be doomed by climate and unattractiveness to lie waste for many generations, are being subdued by labor, made accessible by railroads, and subjected to organized administrations designed to develop their possibilities in surface culture or in mineral wealth.

A special feature of the department will be the large number of collections designed to give what is known of these undeveloped regions of the earth, and what is being done to make them better known. The proceedings of geographical societies are valuable for general descriptions; the accounts of travellers add to these more special information. The most valuable sources are, however, the reports of the consular service throughout the world, for they are governed by certain features that make them highly instructive. They are, as a rule, prepared by men trained in commerce; they are designed to picture the actual movements of trade, and compiled from year to year offer a consecutive record of the transactions at each port where a consular officer may be stationed; they reflect the spirit of the commercial "drummer," who seeks to study the wants of the market, and examines them in the light of the home industries and their

ability to supply what is wanted, in competition with rivals for the trade. A consular report is thus a record of the actual, and a suggestion for the possible, and usually cast in such a form as to illuminate the habits, aptitudes and necessities of the people at or near the port of commerce. I have therefore sought to obtain, and promptly, what is being reported by the consular services of the respective countries, and there are on file the following: American, German, British, French, Austrian and Italian.

To accomplish the best objects certain modifications must be introduced in the library arrangements. The classification adopted for the collections of this department is on the decimal plan (Dewey's system), modified by such changes as the special nature of the books suggests. After much consideration this was deemed the best course to pursue, and its elasticity commends itself in use. In a general collection, where the reader knows what is wanted, the fixed position of the shelf, without regard or with little regard to subject matter, may have its advantages. But in a special collection, where the questions are often vague and usually general, the classification by subject becomes almost a necessity. The end to be attained is the grouping of the records of one line of governmental experience, which may be found promptly, consulted easily, and offer facilities for comparing results of different peoples and countries. So far as it has been tested, the system has proved satisfactory.

While such classification will be of great assistance to both reader and department, special lists will still further make the material known and available. Much of the best statistical work is published in government reports, or periodicals, and is easily overlooked in a general survey. Some accessible record is needed to refresh the memory or direct the attention of the investigator. I have undertaken to prepare a catalogue of the English Parliamentary Papers for recent years, and have in process a catalogue of the United States Congressional publications. I hope to carry the idea further into practice by noting any important article on a social topic in the leading reviews and financial journals, so that the inquirer may be provided with the latest and selected utterances or records by experts upon his specialty. Without undertaking to create original research, or to influence judgment, every effort will be made to encourage study. The highest function of the department must be to have ready at hand the material for all who may apply. I may add that the number of the inquirers is daily increasing, and their questions cover a wide range.

I cannot close without expressing my appreciation of the readiness you have shown to make this department useful, and of your courteous and hearty encouragement. Praise is also due to my assistant, Mr. Lane, for his untiring zeal and his organizing abilities, both of which were needed in introducing order and arrangement in the collection of the Statistical Association. I have been much gratified by the willing co-operation of other departments of the Library, even when my plans traversed their methods.

Respectfully submitted,

WORTHINGTON C. FORD.

(E.)

EXTRACT FROM THE REPORT OF THE CHILDREN'S DEPARTMENT.

CO-OPERATION WITH THE SCHOOLS.

[LIBRARIAN'S NOTE. — While this work is in the experimental stage seems the proper time to point out certain difficulties that have developed in its operation. They are, perhaps, due to misunderstanding or but partial understanding. But as they are not insurmountable, an endeavor must be made to surmount them; and this must begin with a clear appreciation of their nature.

At my request, therefore, the following report contents itself with a statement of the system instituted, omits expatiation upon successful results, and considers more especially some of the difficulties experienced.

For a further description of existing work with the schools see the Report of the Supervisor of Branches, *infra*.]

In May, 1895, an order was passed by the School Committee directing the Board of Supervisors to consider plans. "A conference was held on the 14th of June of that year, between the Trustees of the Public Library and the Board of Supervisors. The Librarian, Mr. Putnam, and the Superintendent of Schools, Mr. Seaver, were appointed a committee to draw up a report to be submitted on the one hand to the Trustees of the Public Library, and on the other hand to the Board of Supervisors of the Public Schools." This report is to be found in School Document No. 14, 1895. For the carrying out of the plans therein contained a special appropriation would be necessary, and thus far no such appropriation has been available. Certain recommendations have been adopted, however, by the Library, and are included in the following brief account of the accommodations offered at the present time to teachers and pupils:

Teacher's cards, so-called, have been provided, allowing the issue of six books for a period of four weeks.

School children under twelve (the age limit below which a regular card is not issued) are allowed privileges.

Four public schools as well as the Parental School, the Cottage Place and North Bennet Street Industrial Schools, have books on deposit. The Hancock School has a regular semi-weekly exchange of about 100 books.

Books for topical reference are from time to time reserved in the branch libraries, either selected from the branch collections or sent from the Central Library. This is done either on requisition from the teachers or at the initiative of the branch custodians.

A list of books for younger readers, including 1,116 titles, has been prepared, representing books for general reading which may be found on the same shelf number in the Central Library and all the branches. This was sent at the time of publication to the head masters of all the public schools, and is on sale at the nominal price of one cent per copy.

In the Fine Arts Department much has been done in the way of circulating among the schools portfolios of photographs, etc., and arranging for meetings, in the department, of classes in architecture, painting, ornamentation, and drawing.

In other departments similar offers to reserve topical material have been made. On January 11, 1897, a circular was addressed by the Librarian to the teachers of the public schools, in which he urges them to possess and read the above School Document No. 14, 1895, and requests particularly that they will "inform the Library systematically of topics to be studied, that they will request books to be set aside touching such topics, that they will agree that while such topics are pending such books shall be reserved instead of being issued for home use." The Custodian of the Fine Arts Department tells me that he does receive occasional requests in accordance with this circular. None such has been received in the Children's Room.

Attention may also be called to the want of understanding among teachers of the necessary limitations in the use of teachers' cards. With the circular above mentioned was sent a short letter describing this use, at the close of which it is expressly stated that teachers' cards are not to be used to draw several copies of the same book; yet applications are frequently made for two, three, and even more copies of a given book, which if granted would deprive the Library of all its copies for other use. These cards are also frequently

presented for current fiction and other classes of books, in a way to indicate an intention to make a purely personal use of them.

It may be asked now what action the schools have taken in response to the report of 1895. On page 7 of the report is the suggestion that the teacher shall "submit to the Librarian, a provisional schedule of the topics to be assigned throughout the ensuing year, or such part of it as can be planned for at that time." Such a suggestion (like the one below) is of course provisional, and perhaps we should not have expected any very general action in response to it; yet so far as I am aware, no single schedule of topics has been submitted.

Again, after calling attention to the desirability of placing collections of books on temporary deposit in the schools themselves, the report continues: "Were each topic studied contemporaneously in all the schools such a deposit would be impossible without a multiplication of copies of the books needed beyond what could reasonably be afforded, but as great latitude is allowed to the various schools as to the order in which assigned courses shall be pursued, it should be possible for the masters of the schools so to vary the order in which topics are taken up, that but a small number of classes shall at any one time be engaged upon any one topic." But, putting aside the question whether such collections should be reserved in the schools themselves or in the Library, if personal observation may be trusted topics are commonly appointed to be investigated at the same time in all the schools, without regard to the possibility of providing books.

This is observed where the topic concerns an anniversary such as Washington's birthday, Patriots' day, or the anniversary of the visit of Lafayette to Boston. There is one difficulty to be avoided, however, even here. We cannot render proper assistance if the request comes, as has happened, only the day before a theme is due. Last fall, at the time of the anniversary of Lafayette's visit, the call came on Tuesday for material on Lafayette for a theme due on the following day. The topic, I was told, had been assigned only the day previous. A second difficulty lies in the fact that topics are assigned which are beyond the comprehension of the pupils, which are abstract, and cannot be made matter of precise reference. In October, four children came to me who had been told to find all they could about "Grasses" in the encyclopædias, a subject one of the most difficult in botany, concerning which all the books are extremely technical. "The tariff," "Capital punishment," "The woman question," are some of the topics

which have been assigned for compositions or debates, topics so comprehensive that the pupil is wholly at sea and bewildered in his attempt to treat them.

Furthermore, although the report directed attention to the value of the habit among pupils of coming with some regularity to the Library, and urged the teachers to accompany them on the first visit and especially to help them become familiar with the use of the collection of reference books in Bates Hall, I have been disappointed at the small number both of pupils and teachers who have been actively interested.

In the spring of 1898 I visited eight grammar schools, some of them several times. I talked with the teachers, made notes of books desired, and examined those provided for the schools. In accordance with recommendations then made a second circular was addressed to the teachers of the Latin, High, and grammar schools. I quote from the circular: "The facilities at the Central Library will be increased and improved. More space for the use of pupils and teachers is to be provided. The Kindergarten Library for the use of teachers is to be enlarged. A special reference library for the use of pupils is to be placed in the Children's Room, and so far as possible a greater number of books needed by the pupils for reference, collateral and supplementary reading is to be supplied.

"What the books shall be should depend largely upon recommendation of the teachers themselves.

"The Library invites each teacher to send in a list of the books that will be of service to teacher and pupil in connection with the work of the coming school year. . . . It may be practicable to prepare for the coming year a graded list of books for collateral and supplementary reading. Such a list for younger readers, as well as a list classified by subjects, is in contemplation.

"In addition to the lists themselves teachers are invited to communicate in writing or otherwise, suggestions with reference to the conduct of this work either as to books or as to service.

"Teachers need not abstain from these lists or from these suggestions simply because the school in which they teach is remote from the Central Library. What will be done at the Central Library may furnish a useful example of what may be attempted later with the Branches or perhaps through the schools themselves."

One thousand one hundred and fifty copies of this circular were sent to the Superintendent of Schools for distribution to all the teachers in the Latin, High and grammar schools. Replies were received from ten of the some one hundred and

eighty teachers in the Latin and High schools, from sixteen of the some eight hundred and ninety in the grammar schools, in all twenty-six replies.

The lists were examined and compared with lists of text-books and of books for supplementary reading furnished the schools, to see what books might properly be supplied by the School Committee, and what came within the province of the Library to supply. The lists were then compared with the Library catalogue to see how far the requests were made with a knowledge of the already existing resources of the Library.

In many instances the lists showed ignorance of the Library, in others a determined effort to multiply copies of a useful book. Long lists were made up almost entirely of books standing on the list for younger readers, and already liberally supplied by the Library.

As a result, between forty and fifty titles were sent to the Librarian and approved by him. From two to six copies of each book were bought, some for circulation, some for the new children's reference library. While certain of these titles were suggested by the teachers, many were the result of my personal observation; and to these as a basis, the Librarian has added some 200 more titles to form a children's reference library in the second Children's Room about to be opened.

To-day the department, with increased space, a new reference library, and with the experience thus far gained, is in a better position to assist teachers and pupils than ever before. A more active co-operation is all that is asked for. Many of the obstacles to effective work would be removed were a special appropriation available. But much may be accomplished with the present funds if four things are observed, two by the School Committee and Supervisors, and two by the teachers:

I. The School Committee to furnish a more adequate supply of the best text-books on the various subjects, so that teachers need not apply to the Library for material properly to be supplied by the city to the schools themselves.

II. The Supervisors not to appoint a special topic for the majority of schools at the same time.

III. Teachers to take advantage more generally of the Library's ability and willingness to meet requests for reserved material, and to locate it temporarily in the branch libraries; a notice to be given of such special requests far enough in advance to enable the Library to meet them conveniently.

IV. Teachers to inform themselves and their pupils more fully as to Library resources and Library methods.

Respectfully submitted,

GERTRUDE P. SHEFFIELD.

(F.)

EXTRACT FROM THE REPORT OF THE BRANCH
DEPARTMENT.

SERVICE OF THE BRANCHES AND STATIONS FROM THE
CENTRAL LIBRARY.

The Daily Issue.—The delivery of books from the Central Library on cards and slips to the branches and stations has amounted for the year to 86,541 volumes, an increase of 30,007 volumes, or fifty-three per cent., over the number for the year ending January 31, 1898. The percentage of unsuccessful applications has fallen during the year from forty-nine per cent. to forty-one per cent.

Active extension of the work of the daily issue is limited by the capacity of the Branch Division at the Central Library and of the library wagons to care for it. The work in the Branch Division is concentrated in point of time. Few people leave slips or call for books at the branches and stations before 1 P.M. The mail has lately been used to equalize this pressure at the Central Library. In addition to this difficulty of concentration of work, the public suffers from not getting its books on the same day they are applied for, since the slips left in the afternoon and evening cannot be filled by us till the next morning. The only remedy for the evil seems to be a second daily delivery at many of the branches and stations, and this would partially solve both problems. It would require, however, the employment of a messenger and of another wagon during part of the day, together with extra service in the Branch Division. I have already submitted to you a report on this subject.

Deposit Work.—There are now forty-eight places to which deposits are sent as against forty-two at the close of last year. The number of volumes sent out this year was 18,378; last year, 12,519. The increase is forty-seven per cent.

On January 31, 1898, there were 5,041 volumes in the deposit collection, 66 per cent. of them fiction. There have

been added during the year 2,947 volumes. Since seventy volumes have been condemned, withdrawn or transferred to the Central collection, the present total is 7,918 volumes, of which sixty-three per cent. are fiction and juveniles.

The deposit collection is a very effective part of the Library equipment. The books are shifted constantly from one to another of the forty-eight places of deposit, and from less than 8,000 volumes, there is a circulation of more than 150,000 per annum. The collection, however, should be larger. As a rule not more than twelve per cent. of the books are upon the Central Library shelves at one time, and many of these are unavailable because of having been the round of the stations. Precisely at this stage in the life of the collection many volumes are falling for the first time into this class of "dead books," not to be sent to any station again till two years from their return from it. Fourteen stations out of eighteen now change fifty instead of twenty-five volumes per month, and this exhausts our resources more rapidly. It is, of course, not advisable to transfer books in block from one station to another, for the stations differ in their needs. To give scope for judicious selection in making up the deposits, and to enlarge present deposits, several thousand volumes more seem needed.

With regard to the quality of the books of the collection, the additions recommended are chiefly such as pass the test of permanent value or enduring interest. There is a proportion of books without much literary merit, which are useful as stepping-stones to better reading. If the collection fails at all it is most likely to be in attractiveness to the ordinary reader, and with this in mind there has been a systematic endeavor to avoid respectable dulness. The collection receives general approval from the custodians, with the important qualification that the demand is for more fiction.

Work with Schools.—One hundred and two special deposits, with a total of 755 volumes, have been sent to the branches and stations this year, chiefly for the use of schools and clubs. To systematize this work we have had printed a form to be used by teachers in asking for deposits. Copies of this form are sent to the neighboring schools by the custodians, together with a circular letter to the masters. Of the number of books reserved at the branches for school use this year, no statistics are available.

Work with schools without the intervention of the branch or station has begun to develop into a system. To four schools, the Brighton High School, Roxbury High School, Charles Sumner School (Grammar) and Rice Training School

(Grammar), deposits have been sent direct. A charging system, with the use of the regular library card, has been adopted, and monthly reports of circulation are sent to us. These schools, therefore, are for certain limited uses stations of the Library. At the Brighton and the Roxbury High Schools, books are exchanged twice a month. The circulation at the Brighton High School, for a few months only, has amounted to 1,108 volumes (home and hall use), and we find that the presence at the school of books which may be drawn on the regular library card rather stimulates the use of the branch than otherwise.

Since many books could not be spared from the Central Library, it became necessary to buy extra copies. Nearly 300 volumes of these have already been ordered. They form a part of the Central collection, but the special stamp "deposit duplicate" indicates that they are at the service of the Branch Division for the use of schools. They have been selected chiefly from lists of recommendations sent in by teachers. In connection with the examination of these lists a record has been made of several hundred volumes likely to be needed of which there is a copy at our disposal on the shelves. Several hundred more books need to be bought. The books for the Grammar Schools (ninth grade) can be supplied generally from the deposit collection. They are of the character of those found in the list¹ entitled "Books for supplementary reading" for the Boston public schools, though no books actually furnished to a school by the School Committee are duplicated by us. The deposit duplicates are intended chiefly for high schools. In character they are books for topical reference. A few examples are given here: Rawlinson, Herodotus; Stubbs, Constitutional history of England; Fustel de Coulanges, the Ancient city; Dowden, Shakespeare, his mind and art; Gosse, Eighteenth Century literature; Lang, Leafe and Myers, Iliad of Homer; Darwin, Power of movement in plants; Lübke, History of art; Clarke, Ten great religions. These are books which the scholars can use freely in no way so well as by having them sent to the school by the Library.

The extension of this system meets various obstacles. There are limitations on our part in the matter of labor, of time and of expense. In order to make a few copies of a book do for many schools it would be necessary (1) that the Library should know what books are kept in permanence at each school; (2) that the schools should not all take up the same subject at the same time; (3) that they should give

¹ In School Document No. 8, 1898.

due notice of subjects to be taken up. Further, if this direct work of the Library with the schools is to become general, a method of co-operation must be adopted, as was recommended in the report on the co-operation of the Library with the schools made by the Librarian and the Superintendent of Schools to the conference of the Trustees of the Public Library and the Board of Supervisors (1895).

Unity of administration of a portion of the books used by the schools seems to be desirable. A partial inquiry shows that with regard to size, character and use, the collections of books held by the schools are diverse. If an agreement for co-operation were made and funds were provided, in addition to furnishing deposits of books for topical reference and general reading, the Library might well administer the collections now at the schools, outside of the following classes: 1. Text-books. 2. Books for analysis in the class-room. 3. Permanent reference books. 4. Collateral reading of a systematically didactic character. This plan would secure uniform methods in the use of books, and records of their use. It would define the functions of the Library and make its work more effective. Such a general extension would involve considerable expense in transportation, additional service and additional copies of books.

If no general plan of co-operation is now practicable, a limited agreement of the same nature by which in certain schools the Library should administer the books described above, in addition to those it might furnish, would be a step in advance. There is a waste of effort necessarily involved in present conditions.

BRANCHES.

Reclassification.—The most important change of the year has been the reclassification and recataloguing of the branches. The collections of books varied in size from 4,000 to 34,000 volumes, and they varied widely in character. The diversity in this latter respect was so great that an examination in one department of American history showed almost no books that were in all the branches. As a step toward uniformity, therefore, we began last June to reclassify the collections according to one system. This involved (1) transferring unserviceable books to the Central Library; (2) renumbering books according to the simple system of the West End Branch; (3) revising the card catalogues, or in some cases making new card catalogues. The revision of the catalogues has gone on contemporaneously with the reclassification, and the result will be complete card catalogues at all the branches,

and an accurate union catalogue and shelf list at the Central Library.

The report of what has been actually accomplished, given elsewhere, shows that one branch is practically completed, that in two more we can see the end not far distant, and that at the others good progress has been made.

Branch Finding List. — Since June 1, 1897, the accessions common to all the branches have been classified according to the West End system and in April, 1898, a finding list of these books was issued, covering accessions up to April 1. This was the first printed finding list or bulletin of all the branches. It will be followed by others, and eventually, it is hoped, by a comprehensive union finding list.

Open Shelves. — At Brighton all the shelves have been thrown open as far as the reclassification has gone. This has involved the remodelling of the interior of the branch, which was completed in September last. By the new arrangement, after passing the issue desk access is free to all parts of the floor. As the progress of the reclassification allowed, the alcoves have been thrown open till only one, containing a part of the fiction, remains closed. Placards designating the classes have been posted, and a notice announcing that the shelves are open to all card-holders over sixteen years of age. School children under the age of sixteen are admitted to certain shelves on application.

At the Dorchester, Jamaica Plain, South Boston and South End branches, where the arrangement of the shelves made it possible, the books in history, or history and biography, have been removed to a position near the gate, and the alcove thrown open to the public. For the branches where this is not practicable at present, placards have been prepared announcing that card-holders over sixteen years of age will be admitted to the shelves for special purposes on application to the attendants.

Sunday Opening. — An experiment this year has been the issue of books on Sunday at Charlestown, East Boston and South Boston. Last year these branches were open for reference and reading only. The Sunday opening began on November 6, and was advertised by placards and by items in the daily papers and local weeklies. The daily averages up to February 1 are here given, in comparison with those for the same months of last year:

	1897-98.		1898-99.		
	November — January.		November — January.		
	Readers.	Adults.	Readers.	Adults.	Books issued.
Charlestown,	213	28%	299	30%	57
East Boston,	278	8%	270	20%	33
South Boston,	248	36%	253	45%	26

The largest issue of books at Charlestown was 90, at East Boston, 62, at South Boston, 46.

The attendance and the percentage of adults have therefore been good, but the issue of books small. There has been, however, a steady gain in this particular at Charlestown and East Boston, the average for January being 66 at the former and 39 at the latter. But in any case the experiment must be tried longer. I note in this connection that the West End Branch and Station P continue to have a good circulation on Sunday. As to expense, it costs no more to issue a moderate number of books than to furnish suitable service on Sunday without this feature, since it has been found that two attendants at each branch are desirable merely to assist the readers and to preserve order. The cost has been \$7.60 or less at each branch, \$2 of which is paid for heating the rooms.

Service. — At the weekly meetings of the custodians a wide range of topics is discussed, as is shown by the minutes which have been kept. About once a month a meeting of a special character has been held, as at Brighton to inspect the open shelves, or at the Juvenile Room to examine the methods. We sometimes have a paper on an appointed subject followed by a discussion.

Books. — Four thousand two hundred and twenty-two volumes of new books have been bought for the branches, as against 4,657 last year. Very few of these are permanent reference books, or books for younger readers. Since last June no new books have been bought for Charlestown on account of the crowded condition of the shelves.

Periodicals. — An approximate uniformity seems desirable in the periodicals furnished to the branches as well as in the books. The lists were until recently very diverse in size and character. Avoiding sweeping changes, other lists have been prepared which are less unequal, and a radical revision is proposed after a year of observation. Periodicals of narrow scope like the "China Decorator" and the "Phonetic Review," and others of small literary merit, have been dropped, and such magazines as the "Review of Reviews" have been put on all the lists.

Circulation. — By the table of circulation it appears that the total for the branches is 660,171 as against 659,099 for the year ending January 31, 1898, a gain of less than one per cent. There are special conditions which affect the circulation at some branches, as at Jamaica Plain which the existence of the Boylston Station no doubt injures, or at East Boston where the centre of the reading population

moves steadily away from the branch. At Charlestown, lack of new books must be taken into account. The fact that this has been a transition year both as regards the administration of the department and the re-classification is fairly to be noted, and perhaps also the general character of the year, which has been more favorable to the reading of newspapers than of books.

DELIVERY STATIONS AND OTHER AGENCIES.

Enlargement and Improvement. — One new delivery station has been added this year, Station U, on Union Park street in Ward 9. It was opened on December 27, with a deposit of 400 books. The circulation for January was 1,490 volumes, 325 of which were drawn from the Central Library. This shows that the station meets a need. In fact there is no other library agency actually within the limits of Ward 9, and the district is densely populated. The establishment of the station, was, however, made possible only by the offer of rooms by the Archbishop and the clergy of the Cathedral of the Holy Cross. In type it is therefore like Station S.

On April 28, a deposit was sent to Station E at Neponset, so that all our stations have now the deposit feature.

Portfolios of pictures have been sent for the first time this year to the three reading-rooms, A, D, and L, and to Station S. There is unfortunately no room to display pictures at the reading-rooms F and P.

Seven of the eighteen stations are now in charge of Library employees, and meetings of these custodians have been begun, with the intention of furnishing an opportunity for the discussion of the problems and interests connected with their work.

Sunday Opening. — Two of the stations have been open on Sunday since October 1, Station P (Broadway Extension Reading-Room), and Station S (Roxbury Crossing), the latter for the first time. At both, books have been issued for home use. The statistics show that the Broadway Extension Station is literally crowded with Sunday readers. Another attendant has been added for the evening. The average number of books issued has been 54. At Station S there has been a steady but smaller attendance and issue. The collection of books, however, is not so attractive as at the former station, and only one-quarter as large.

Circulation. — The circulation this year directly from the stations has been 175,552 volumes as against 163,938 last year, a gain of seven per cent.; but the total circulation of the stations, including the institutions, engine-houses and schools,

264,672 volumes, shows a gain of 23.7 per cent. over that of last year.

Types of Stations. — There are now three types of stations, all having the delivery and deposit features: 1. Reading-rooms, with a library employee in charge, and with periodicals and reference books. 2. Stations in charge of a library employee, but having no periodicals or reference books. 3. Stations in shops where the proprietor furnishes space, light, heat and service. Stations of the second kind may for convenience be called service stations, those of the third kind, shop stations. Stations S and U are service stations, though Station S has two characteristics of a reading-room, space for reading tables, and a few periodicals. Eleven of our stations are shop stations.

The ideal would seem to be the reading-room, and next to it the service station. The latter tends constantly to develop into the former. Station P was not originally a reading-room, but has become one, while at Stations S and U the recent small donations of books mark a change, as do also the enlargement at Station S and the addition of periodicals mentioned above. Considerations of expense are the obstacles to this natural development.

But the common characteristic of the reading-room and the service station is that each is in charge of a library employee, and this is the important feature. It gives both the Library and the public the advantage of more intelligent service. There is hardly any station where advice and information about books is not asked for or where school children do not come with questions. It is desirable, therefore, to have in charge a custodian who is imbued with the library spirit and is capable of given help to inquirers; while, further, if a station is to become one of the intellectual centres of its district, a trained custodian is absolutely necessary.

The cost of maintenance of this type of station may be estimated at about \$1,000 per annum if enough is allowed for rent to provide a room of moderate size. In the more distant suburbs \$850 might be sufficient. As against this, the cost of a shop station with a circulation of over 21,000 volumes is approximately \$643 at the present rate of compensation. The difference is important in a consideration of ways and means, but it does not offset in my opinion the additional advantages of a service station. The extra expense must, no doubt, prevent action that might otherwise be taken; but service stations might be established as easily as shop stations if the rent, light and heat were furnished by

private individuals or institutions, with a reasonable guarantee for continuance. Under such an arrangement for sharing the burden of expenses, Stations S and U are carried on.

Other Agencies. — At the Hancock School, in the North End, where there is a delivery of books from the Central Library on cards, the circulation for this year has been 6,831 volumes as against 3,937 for the last year. To the Fleet-street Free Reading Room for Men have been sent deposits of books every two weeks, from the West End Branch. We have sent, as heretofore, monthly deposits to twenty-two engine-houses and ladder companies. No more can be served at present by the Library wagons. The House of Reformation on Rainsford Island, and the Cottage-place and North Bennet-street Industrial Schools have received regular deposits, but those to the Marcella-street Home ceased in October because of the removal of that institution. In September last we began sending large deposits from the Central Library to the Parental School for Boys at West Roxbury, in place of thirty volumes per month from the West Roxbury Branch, the resources of which were insufficient for the needs of the school.

From all the institutions, records of the use of books are sent to us each month. The North Bennet-street School has sent us the first number of an interesting little magazine in manuscript prepared by the pupils. It is called *Book Reviews*, and contains original accounts of some of the books furnished by the Library. In January a deposit of books was sent to the Back Bay post-office station for the use of the letter-carriers.

BRANCH DIVISION. — CENTRAL LIBRARY.

Inter-Library Loans. — The number of volumes lent to other libraries this year was 224 as against 135 last year. Twenty-seven applications were denied. Nineteen books were borrowed from other libraries.

Distribution of Periodicals. — A new function of the Branch Division is the distribution of periodicals to the penal institutions, the pauper institutions, and the insane hospitals of the city. The periodicals are those not required for binding at the Central Library or the branches. The work has been systematized, but statistics must be postponed to another year.

Respectfully submitted,

LANGDON L. WARD,

Supervisor of Branches and Stations.

(G.)

MEMORIAL OF THE DEATH OF ARTHUR MASON
KNAPP, 1839-1898.

On Tuesday, December 27, 1898, died Arthur Mason Knapp, Custodian of Bates Hall in the Boston Public Library.

He was born at St. Johnsbury, Vermont, August 3, 1839, the son of Hiram Knapp and Sophronia Brown. During his boyhood the family removed to Boston, where he fitted for college at the Boston Latin School. He was graduated as the first scholar in his class, and entered Harvard College as a member of the class of 1863. He held from Harvard the degree of A.M. as well as that of A.B.

After teaching for some years in Phillips Academy, Andover, in the Boston Latin School, and in the Brookline High School, he entered the service of the Library January 23, 1875. His first appointment was to the charge of the special collections of the Library; from 1878 until his death he held the position of Custodian of Bates Hall.

His knowledge of Shakespeariana and of Elizabethan literature was of great value in the preparation of the catalogue of the Barton collection. In his position in charge of the main reference department of the Library, his special knowledge of the subject of genealogy and local history, as well as a thorough general knowledge of the resources of the Library on all subjects, was of the greatest service to an immense constituency of readers. To the value of this service, rendered with exact conscientiousness and singleness of purpose in its relation to his colleagues, and with assiduity and personal interest towards the readers and students who came to him for assistance, the warm appreciation of all those with whom he came in contact bears witness.

Passages from the address of the Rev. Dr. James De Normandie at the funeral services, December 30, 1898:

The public is most exacting of its servants, and feels that all their time and strength and acquisitions belong to it without a moment's delay, without any manifestation of impatience or weariness. To have been for nearly a quarter of a century in such a service is itself a great testimony to one's worth, and to have been for twenty years the trusted head of one of the leading departments of the Public Library is a proof of merit to which words can add very little.

The accumulated and well-arranged learning of our friend, as if it were all in a multitude of familiar drawers, was freely given to any inquirer. Many came every day to ask not only for books, but to know what books or what essays had been written upon every subject recent or ancient, plain or abstruse, that the fertile mind of man has ever thought of — and here was one who seemed to remember all; whose good taste and good judgment were ever ready to suggest not only books, which is a very little matter, but the *best* books, which is a very important matter touching the higher question of life — so that his daily work was to give to hundreds better ideals of human actions, and human character; making his mission one with all those who in every form of teaching, in journalism, in schools, and in the church, are helping this to be a better world.

What knowledge, what graciousness, what a ready and unfailing sympathy, what a sense of humor which so lightens the annoyances of public station, what a spirit of self-denying, what faithfulness marked his daily life. When St. Paul would express the highest merit of a steward, he says “it is required that a man be found faithful,” and when Jesus Christ would set a seal of divine favor and divine joy upon a man’s work he told the beautiful story of one who was faithful to his talents, his gifts. Servants and stewards of the Most High, all of us, our best reward is that we be found faithful. Only faithful! In the midst of so much that is unfaithful, in the midst of so many noisy activities which count for nothing and end in nothing, God grant that when our work like his is done, there may be written upon it the promise of Jesus, “thou hast been faithful over a few things, I will make thee ruler over many things, enter thou into the joy of thy Lord.”

REPORT OF THE EXAMINING COMMITTEE FOR 1898.

To the Trustees of the Boston Public Library :

GENTLEMEN,—The following persons were appointed members of the Examining Committee for the year 1898 :

J. Bapst Blake, M.D.	Hon. Henry W. Bragg.
Hon. Patrick A. Collins.	Rev. Arthur T. Connolly.
E. Winchester Donald, D.D.	William H. Ensworth, M.D.
Mr. C. W. Ernst.	Miss Gretchen Field.
Mr. Alfred Hemenway.	Mr. Thomas Hills.
Mr. John H. Lee.	Mr. A. Lawrence Lowell.
Miss E. F. Mason.	Mrs. Elizabeth F. Parker.
Mr. James J. Roche.	Mr. Charles P. Searle.
Mrs. Sarah H. Williamson.	Mr. Frank Wood.

On June 2, 1898, the committee was organized by the choice of Mr. Hemenway as Chairman, and Mrs. Elizabeth F. Parker as Secretary.

The following sub-committees were appointed :

On Administration.

Mr. Alfred Hemenway, <i>Chairman.</i>	
Hon. Patrick A. Collins.	Rev. E. Winchester Donald, D.D.
Miss Gretchen Field.	Mrs. Elizabeth F. Parker.
Mr. Charles P. Searle.	Mrs. Sarah H. Williamson.

On Books.

J. Bapst Blake, M.D., <i>Chairman.</i>	
Mr. C. W. Ernst.	Mr. James J. Roche.

On Catalogues, Bulletins and Finding Lists.

Mr. A. Lawrence Lowell, <i>Chairman.</i>	
Mr. William L. Putnam.	Miss E. F. Mason.

On Branches and New Modes of Distribution.

Hon. Henry W. Bragg, <i>Chairman.</i>	
Mr. Thomas Hills.	Mr. John H. Lee.

On Finance.

William H. Ensworth, M.D., <i>Chairman.</i>	
Rev. Arthur T. Connolly.	Mr. Frank Wood.

The Sub-Committee on Books reports as follows :

As Chairman of the Sub-Committee on Books I have the honor to submit the following report :

Your committee recalls the recommendations of the previous committee and agrees with them.

They were, substantially, that the three great libraries of Metropolitan Boston should not, in either their collections or their aims, unnecessarily duplicate one another, and, that the Boston Public Library should be particularly strong in books upon every subject related to the city of Boston itself.

Your committee would emphasize particularly the latter of the above two recommendations, and would again call attention to the fact that there are not sufficient reference books in the various rooms ; that the collection of maps and atlases is by no means to be compared in completeness with the files on most other subjects ; and that the Library is particularly weak in guide books of modern years. Your committee recommends that these departments be strengthened.

The Sub-Committee on Catalogues, Bulletins and Finding Lists reports as follows :

There are now in the Library the following catalogues :

1. The Lower Hall card catalogue in the Delivery-room, relating chiefly to recent fiction.

2. The catalogue of the Barton Library in the bound volume of catalogues near the Bates Hall catalogue.

This is a special library, chiefly relating to dramatic works, and containing many Shakespearian editions.

3. The card catalogue of articles in scientific periodicals not only in this library, but in a number of associate libraries. This has been recently started, and is kept near the Bates Hall catalogue.

4. The Bates Hall card catalogue which covers the books and bound periodicals not in the preceding catalogues, and many of the books that are also in the Lower Hall catalogue and the Barton catalogue.

5. Special card catalogues in different rooms, devoted to the special class of books kept in that room.

6. Printed catalogues, in bound volumes, on special subjects or branches, issued from time to time by the Trustees.

7. Lists of books on special subjects, which have come out in connection with different numbers of the Bulletin.

8. The Annual List of all books received during the year, arranged by subject.

At first sight it seems as if there must be an unnecessary multiplication of catalogues, but to a large extent it will be found that they serve different purposes.

The first five classes of catalogues are intended to enable people searching for a book to find it, and also to enable them to discover what books are in the Library on any subject. In all of these the book will be found, as a rule, under the name of the author, under the subject, and often also under the title.

The last three classes of catalogues are intended primarily to inform the public what books are to be found in the Library, to bring its contents to their notice, thus fostering an interest in good reading.

The Bulletins are distributed free.

The Annual List of the important books received is sold for five cents, and the books are classified by subject, so that a person interested in any branch can ascertain quickly what new books he ought to read. We cannot too highly commend the institution of catalogues of this character.

The question of extending the Bates Hall catalogue, so as to include all the books of the Lower Hall catalogue and of the Barton catalogue and special periodical catalogue, so as to make the Bates Hall catalogue a complete list of the entire Library, has, we understand, been carefully considered by the Trustees. While there is much to be gained by this course, there are advantages on the other side, and we do not feel that the investigation that we have been able to make, necessarily brief, warrants us in recommending any change in this respect.

We recommend, however, that there be posted conspicuously in the Delivery Room and the Bates Hall catalogue room, in the Reading Room, and perhaps in other conspicuous places, a summarized list of all the catalogues open to the public, with the class of books contained in each, and the place where the catalogues may be consulted; and, incidentally, we think that the sign over the Lower Hall card catalogue in the reading-room should be changed so as to indicate that the Bates Hall catalogue is the principal one in the Library.

These changes, we think, will save time in finding books.

It is becoming more and more important and necessary that everything shall be done to improve and complete subject catalogues, and we especially commend the course of the Trustees in obtaining the assistance of persons specially conversant with the subject in the preparation of some of the more recent special lists and bulletins. This course should be followed in future wherever possible. A special catalogue, made up only by the employees of the Library from the Bates Hall catalogue, is much less helpful than one made by

a person who has made a study of the subject, and is familiar not only with its bibliography, but with the relative value of the different books. It is liable, also, not to display in proper relative importance the full resources of the Library.

We again recommend for the consideration of the Trustees the suggestion made last year — that the card catalogues used in making these special catalogues be kept up to date, and that duplicates be placed in the Bates Hall catalogue. We also suggest that where a subject in the Bates Hall card catalogue comprises many titles and is much subdivided, a table showing briefly the arrangement of the divisions be placed on the first card.

In many of the larger subjects treated by the card catalogues, the subdivisions are indicated by larger cards of a brown color, which are easily distinguished in glancing along the top of a drawer full of cards. This is excellent as far as it goes, but we recommend that the system be greatly extended, and that all the drawers be subdivided, and, as it were, indexed in this way. The saving of time which can thus be effected will be very material.

The special catalogue of articles in scientific periodicals is one of the most hopeful signs of the times, for it is an experiment in co-operative work among a number of large libraries. The catalogue itself was intended to cover periodicals not included in Poole's and other indices; at least it was intended to do so in certain branches of study. Such an experiment is necessarily incomplete at first, and it is to be hoped that before long the list will be extended so as to include all the good periodicals in any branch of learning that is covered at all. This is very far from being the case now, and the gaps are numerous and striking.

In making these suggestions the committee is thoroughly sensible of the fact that the Boston Public Library has carried the art of cataloguing to a higher point than any other library of the size in the world. But this does not exclude the possibility of improvement in details.

The Sub-Committee on Branches and New Modes of Distribution reports as follows:

The report of the Committee on Finance canvasses so thoroughly the necessity of suitable buildings for most of the Branches, and the impossibility of obtaining appropriations for any such improvements, that your committee forbears to do more than emphasize the suggestions of that report.

The rooms occupied by the East Boston Branch are entirely inadequate and unsuitable, and almost any change would be an improvement.

The furniture and appliances are of the cheapest kind; the reading-room which is practically a part of the stack room, has no means of ventilation, and is improperly heated and lighted.

The surroundings are such that young people who are expected to resort to the Library are subjected to sights and influences which can only prove baneful.

The Charlestown Branch is the largest branch, and now contains over 32,000 volumes, while it has room for only 25,000 volumes, notwithstanding no new books have been added since May 1, 1898. This overcrowded condition could be temporarily relieved by the removal to the Central Library of some 4,000 volumes comprising the "Harris Collection," which are seldom, if ever, used, and each year become more valuable, as the collection must always be composed of books published prior to 1850.

The income of the Harris Fund has accumulated to about \$4,000, and opportunities to increase the collection are frequently lost, by reason of lack of space above referred to. This would be obviated by the removal of this collection to the Central Library, where it would be not only protected against loss, but be of actual service to many now debarred from its use. Such removal has been heretofore earnestly opposed, but we have yet to learn of any ground for such opposition, except a vague sentiment, not shared by those who have the only right to urge it.

The whole library is exposed to the danger of fire from the adjoining buildings, which are used for stables. This risk can be greatly reduced by placing iron or tin shutters upon the rear windows at a small expense.

There should be some means of separating the adult reading room from that of the juveniles.

The chairs should be provided with rubber tips to prevent the noise which cannot be avoided otherwise.

There should be periodical racks for the tables, thus avoiding disorder and preserving the magazines for binding.

Most of these suggestions are applicable to each of the branches, and as the expense to be incurred is small, and the benefits to be derived are large, it seems wise economy to adopt and complete these improvements at once.

The West End Branch is the best equipped of all, probably because it is the most recent. The marked success in remodelling this old church for library purposes, suggests the propriety of the city securing one of the churches in Charlestown for a like experiment. The church on Monument square is the most centrally and conveniently located, is now

vacant, and probably could be purchased at a very reasonable price, and could at small expense be converted into a light, airy and convenient library building.

An increased use of the branches and consequent relief to the Central Library will, we think, be found to follow an increase of reading matter and better accommodations for their readers; and if the appropriation at the disposal of the Trustees will admit of larger expenditure for these purposes, a larger circulation and a larger attendance in branch reading rooms would doubtless result. What seemed the ample space of the West End Branch is often crowded and among the items of increased expense to be first considered should be the moderate cost of furnishing a section of its gallery for a juvenile department — giving to adults the exclusive use of the main floor. An opportunity exists to greatly increase the efficiency of the West Roxbury Branch at a small expense by adding an unoccupied and now useless room to its contracted quarters. In both these cases the need is so obvious and the first cost so moderate, that nothing but inadequate appropriations that will not admit of adding to the cost of administration the compensation of the increase of the working force that would be required to manage the larger area in use, should postpone the improvements.

The uniform numbering of the books of all the branches which we found in progress is a decided advance over former methods. When finished, and every book in any branch bears the duplicate number of the same work in any other branch, it will be possible to publish a branch library catalogue of works common to all branches, to be supplemented by printed cards for the card catalogues of the larger collections.

The delivery stations of the several branches in the outlying districts are widely scattered, their collection of books for home reading must of necessity be limited, and it often happens that a resident of a district where a station is situated who desires a work from the Central Library comes from a considerable distance to apply for it, and comes again the succeeding day only to find that it has not been received at the station. The expenditure of time and energy may have been material, but when the object of both visits has been accomplished, such expenditure is but the fair share of sacrifice and exertion of the student or reader. A house to house delivery of books called for, by the teams or messengers of the city, would be too expensive to be seriously considered. But when time is expended and distance travelled, only to ascertain that the book applied for could not be obtained and

that another trial must be made, more than the fair share of work is put upon the applicant if a method can be devised that will save the waste of what may be valuable time. It seems to the committee that, without expense to the department and with but little trouble to the custodians of branches or stations, a very simple method will meet the requirements of a case where the delivery of a book applied for must for any cause be delayed. Postal cards printed in proper form for the filling of blanks could be furnished those in charge of library work; these could be paid for and properly addressed by any persons desiring their use, who, when the desired volume reached the station, would receive by mail notice of the fact of its arrival and that the book applied for awaited their call.

The Committee on Finance reports as follows:

The committee finds that the system of auditing and payment of bills is a good one, and that the salaries and expenses for the past year have been satisfactory.

A system of checks has been introduced into the printing and binding department that allows instant detection of any loss or waste of material, and points to where such loss has occurred.

The committee recognizes that, in the not distant future, the Central Library will have to be enlarged. Although the Central Library has been in use but five years the demand made upon it has exceeded anticipation, and in some respects the building is already inadequate in space.

The stack room is rapidly being filled. Its total present capacity is 500,000 volumes. It contained on January 31, 1898, 410,007 volumes. The increase by accession the past three years was 47,341 volumes. The increase for the year 1897-98 was 16,344 volumes. With the present ratio of increase the stack limit will be reached in little more than four years. It would seem wise to be prepared to meet the demand in advance.

There are two pieces of property, probably available, in the rear of the library, either of which would be ample and each has merit.

The one, facing on Blagdon street, consists of a block of six houses, giving an area of 13,250 sq. ft., which is assessed with buildings, for \$153,000. This property is on the side with the present stack room.

The other is the property facing Boylston street at the corner of Exeter street, owned by Harvard University. It contains an area of 33,000 sq. ft., and is assessed with building, for \$264,000. This latter property already contains a building that could be used with advantage by the Library

for its more popular side, and thus much relieve the present building.

While this need is not an absolute necessity the present year, the committee would recommend its early serious consideration.

As to the branches, the Finance Committee confined itself to four. While the other branches are well taken care of in the matter of buildings, these four, in great contrast to the others, are sadly in need of new library buildings.

First, and by far the most needed in the way of new buildings, is a new branch library building in East Boston. We coincide with the report of the Examining Committee for the past two years when it says that "this branch is unfortunate (a) in its room, which is dull and dingy by day, poorly lighted by night and unattractive and ill-ventilated all the time; (b) in its material equipment, both of books and furniture; (c) in its surroundings, being over a municipal court-room and opposite a police station; and (d) in its location with reference to the centre of the population it is meant to serve."

East Boston, by its isolated geographical position, is entitled to a well-equipped library, yet it has at present the poorest library accommodations of any locality of its size in the State.

The Charlestown Branch is inadequately provided for in unsuitable rooms over a police-station.

The South Boston Branch is in rooms whose rent is \$2,500 per annum, the equivalent of 3% on a principal of \$88,000. The city should own its own library building here.

The South End Branch is in the High School building, and must soon vacate to make room for the needs of the school. This branch should be located nearer Washington street.

In view of the obvious need in these four districts for new buildings, we would recommend that the city government be petitioned for an appropriation of \$400,000 for the purpose of building and equipping these four new buildings. A similar appropriation of \$500,000 has been recently granted to the School Committee for the erection of four new high schools, and its wisdom has been approved. It would seem that these much-needed educators and adjuncts to the schools, the libraries, should be similarly favorably considered.

While the Central Library building has been generously considered in the very recent past, the branches have not received any consideration beyond their routine expenses for many years. It would seem that before any large amount is again spent on the central building, the much-needed new branches should be provided for.

The various branches present opportunities for generously disposed persons who wish to benefit their fellow-citizens, and at the same time leave a memorial to their efforts, to establish a modern library building, in whole or in part, this building or part of building, to be named for the donor, as is Bates Hall or the Ticknor or Barton libraries among the various book collections.

We recommend such disposition to those whose means and desires allow such action as an excellent method of benefiting, for many years to come, their fellow-citizens in the locality in whose midst they reside; and to such others who, although they may not live in one of these districts, may desire to furnish a much-needed benefit to a chosen locality. An excellent example has recently been set along the line of public benefaction by Mrs. Ahl, of the Back Bay District, who bought, furnished and presented to the city of Boston a gymnasium in East Boston.

While it has been a custom among public-spirited citizens of means to endow schools and colleges, these very necessary adjuncts to education, the libraries, have seldom been remembered in Boston to the extent of a new building or part of a building.

The Sub-Committee on Administration reports as follows :

The investigations of the committee have confirmed its belief in the capacity and faithfulness of the Trustees—and that the money expended on the Boston Public Library has been wisely used. Among scholars it has a world-wide reputation. To strangers, aside from our historic places, it is the chief attraction of our city. In the value of its books it far exceeds the Library of Congress—and by reason of wise purchases that value is constantly increasing. The internal arrangements of the Library building are far from ideal, but the recent changes, not yet completed, at least mitigate obvious defects and add to its efficiency. The calls for books will be more quickly answered. The time of the reader will be saved.

The Children's Department has been greatly improved. Their rights have been secured without serious detriment to their elders.

The ventilation of the building has been made better.

The courtesy of the employees is worthy of commendation.

The condition of the Library is one of progressive improvement.

So long as perfection is unattainable there is always room for criticism. But the sentiment which found expression in

the founding of the Library is still strong, and the faith of the people in its future is unfaltering. "No entertainment is so cheap as reading, nor any pleasure so lasting," says Lady Montague.

"Books," says Cicero, "are the food of youth, the delight of old age, the ornament of prosperity, the refuge and comfort of adversity."

"If the riches of both Indies," says Fénelon, "if the crowns of the kingdoms of Europe were laid at my feet, in exchange for my love of reading, I would spurn them all." These seem extravagant words. They exhaust the language of eulogy. But riches and crowns are but adventitious and incidental possessions. They are only the frame of the picture. He who loves to read has a shield against calamity. The inequalities of life are hard to bear. But the Public Library tolerates no inequality. It dispenses its benefits with an even hand. Within its walls all are noble; there is no peasantry. It is a republic and all are sovereigns — there are no subjects. To this temple its worshippers should come with *clean hands* and pure thoughts. Books are no longer chained. Emerson said that the colleges, while they provide us with libraries, furnish no professors of books, and no chair is so much needed.

The Boston Public Library is open to no such criticism. The Librarian is not a mere custodian. To that office belongs the higher duty of assisting readers in their use.

The more a book is read the more valuable it becomes. Of all useless things the most useless is an unread book.

In the time of Queen Anne, Macaulay tells us that a shopkeeper or a farmer who found any pleasure in literature was a rarity. To-day a taste for reading is well-nigh universal. Over 2,000,000 persons enter the various departments of the Library during the year. So universal is this taste that we are apt to forget that it needs direction. Omnivorous reading is not wise reading. A cultivated is better than an omnivorous taste. Desultory reading is mental dissipation. It does not promote mental growth. We cannot commend too highly the courtesy and intelligence of the Librarian and his assistants in their wise endeavor to render all possible aid to readers of all capacities who come to the Library for "light and leading."

The reports of the respective sub-committees were accepted and adopted by the Committee.

(Signed.) ALFRED HEMENWAY,
Chairman.

(Signed.) ELIZABETH F. PARKER,
Secretary.

APPENDICES.

1898.

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APPENDIX I.

FINANCE.

BOSTON PUBLIC LIBRARY,
AUDITING DEPARTMENT, February 1, 1899.

To the Trustees:

GENTLEMEN, — The undersigned herewith presents a statement of the receipts and expenditures of the Library Department for the financial year commencing February 1, 1898, and ending January 31, 1899; also a statement concerning the trust and other funds, statements covering special appropriations, and a statement of expenditures on account of the branches for the twelve years ending 1898-99.

Respectfully,

A. A. NICHOLS,
Auditor.

RECEIPTS.

Balance from 1897-98	\$356 89	
Appropriation, 1898-99	245,000 00	
Transfer by City Auditor, January 31, 1899	1,498 98	
		\$246,855 87
Income from Trust funds:		
Balance from 1897-98	\$4,868 00	
During the year	11,306 67	
		16,174 67
London accounts:		
Balance in hands of J. S. Morgan & Co., February 1, 1898:		
Trust funds income \$14,628 19		
City appropriation, \$12,573 92		
Interest, 311 39		
		12,885 31
During the year:		
Interest	460 18	
		\$27,973 68
Balance in hands of Baring Bros. & Co., February 1, 1898	72 75	
		28,046 43
<i>Carried forward</i>		\$291,076 97

<i>Brought forward</i>		\$291,076 97	
Donations :			
From W. C. Todd, unexpended			
February 1, 1898	\$310 04		
From Woman's Education Associa-			
tion, unexpended February 1,			
1898	1 87		
From Boston Numismatic Society,	300 00		
From Elizabeth Lewis :			
Unexpended Feb-			
ruary 1, 1898	\$8 50		
During the year	200 26		
		208 76	
From sundry sources for the pur-			
chase of photographs :			
Unexpended February 1, 1898 . .	85 21		
From Old South Church Society . .	30 00		
From Lilian Whiting	25 00		
		960 88	
Exchange account : lost books, sales of duplicates,			
etc. :			
Balance from 1897-98	\$1,036 42		
During the year	335 36		
		1,371 78	
Interest on bank deposit		1,600 61	
		<u>\$295,010 24</u>	

EXPENDITURES.

General library accounts, including			
the cost of maintaining branches :			
Salaries :			
General administra-			
tion	\$128,109 74		
Sunday and evening			
force	17,166 98		
		\$145,276 72	
Books :			
City appropriation	\$17,197 33		
Income from Trust			
Funds	11,837 71		
		29,035 04	
Periodicals		5,900 06	
Newspapers :			
Income from Todd			
Fund	\$1,836 40		
Balance from 1897-98, ...	310 04		
		2,146 44	
<i>Carried forward</i>	\$182,358 26	\$295,010 24	

<i>Brought forward</i> . . .	\$182,358 26	\$295,010 24
Binding :		
Salaries . . .	\$12,607 57	
Stock . . .	1,499 48	
Equipment . . .	419 66	
Contract work	\$2,918 46	
Contract work, (British patent specifications.)	369 44	
	3,287 90	
		17,814 61
Printing :		
Salaries . . .	\$4,806 19	
Stock . . .	2,601 24	
Equipment . . .	1,068 02	
Contract work . . .	1,547 31	
		10,022 76
Furniture and fixtures . . .		5,931 74
Gas . . .		1,825 14
Electric lighting . . .		1,968 74
Cleaning . . .		7,404 85
Small supplies . . .		2,416 13
Stationery . . .		2,023 91
Rents : Branch Libraries and Read- ing-rooms . . .		5,600 00
Fuel . . .		6,789 78
Repairs : stock and contract work,		7,079 41
Freights and cartage . . .		751 66
Transportation between Central Li- brary, Branches and Delivery Stations . . .		3,573 17
Delivery stations, service . . .		4,030 40
Water-rates . . .		1,718 60
Telephone service . . .		334 60
Postage and telegrams . . .		1,054 52
Typewriting . . .		261 83
Travelling expenses . . .		495 90
Advertising . . .		326 75
Examination of accounts . . .		300 00
Insurance . . .		135 00
Grounds . . .		2 40
Books : E. Lewis gift . . .		208 75
Books : Old South Church Society gift . . .		30 00
Books for West End Branch :		
Woman's Education Association gift . . .		1 87
Books : Boston Numismatic Society gift . . .		62 87
<i>Carried forward</i> . . .	\$264,523 65	\$295,010 24

<i>Brought forward</i>	\$264,523 65	\$295,010 24
Photographs, subscription gift	43 00	
Exchange account :		
Refunded for books returned	13 39	
		264,580 04
Balance		<u><u>\$30,430 20</u></u>

The balance is made up of the following items, viz. :

Cash in City Treasury :		
Income from Trust Funds	\$7,903 26	
Cash on deposit in London :		
In hands of J. S. Morgan & Co. :		
Trust Funds	\$9,473 12	
General Funds	9,717 72	
Photograph Fund	42 21	
		\$19,233 05
In hands of Baring Bros. & Co. :		
General Funds	72 75	
		19,305 80
Cash on deposit with New England Trust Co. :		
Unexpended of donations carried to account of 1899-1900 :		
Boston Numismatic Society	\$237 13	
Lilian Whiting	25 00	
Elizabeth Lewis	01	
		262 14
Exchange account : lost books, etc.		1,358 39
Interest on bank deposit		1,600 61
		<u><u>\$30,430 20</u></u>

GENERAL APPROPRIATIONS.

Comparative statement for fiscal years ending January 31, 1896, 1897 and 1898.

	1895-96.	1896-97.	1897-98.
Salaries: General administration	\$93,904 80	\$113,004 21	\$119,698 26
“ Sunday and evening force	11,130 60	17,558 07	17,386 11
Binding: Salaries	10,626 87	11,847 64	11,960 65
“ Stock	2,406 14	1,504 61	1,623 17
“ Contract work	1,718 54	1,420 72	3,802 11
“ Equipment .....	.....	488 75	296 53
Books	18,231 88	25,040 32	26,486 83
Periodicals	5,307 49	6,049 10	6,435 76
Furniture and fixtures	8,428 84	1,195 78	1,871 42
Gas	1,729 76	1,790 90	1,673 58
Electric lighting and power	4,758 42	1,576 85	1,991 03
Water-rates	595 00	1,374 50	1,465 80
Telephone service	480 11	390 72	355 45
Expense: Miscellaneous	3,894 54	1,473 76	858 33
“ Cleaning	3,870 55	4,612 68	5,424 92
Printing: Equipment	5,300 00	2,774 89	4,100 97
“ Stock	1,012 92	4,301 64	1,337 97
“ Contract work	4,960 44	1,517 10	1,331 97
“ Salaries	485 00	3,761 99	4,651 67
Stationery and Library supplies	3,200 40	3,996 26	3,973 98
Fuel	6,192 07	6,585 01	9,123 03
Rents	6,285 48	4,884 00	5,215 00
Repairs: Stock and contract work	1,987 29	3,689 24	2,507 58
“ Salaries	2,699 00	2,049 83	2,411 42
Transportation, postage, etc.	3,769 25	1,969 13	3,086 36
Transportation between Central Library and Branches	3,285 43	3,562 25	3,491 04
Rent of deliveries, including Custodians' services	2,347 25	3,105 38	3,990 85
	\$208,608 05	\$231,525 33	\$246,541 79

NOTE. — Gross expenditure for the year 1895-96 includes payments made from the balance of the special appropriation for “moving expenses, \$6,341.12,” distributed among the appropriate items, and payments from the revenue from the old Library Building for the West End and Mattapan Branches.

The cost of maintaining the branches makes part of the general items of the several appropriations:

Cost of Branches, 1895-96	\$47,997 23
Cost of Branches, 1896-97	62,785 39
Cost of Branches, 1897-98	58,282 49

Amount expended for books is for bills paid out of the city appropriation only.

The amount expended for books and binding (not included above) paid from trust funds and city money in hands of London bankers:

For 1895-96	\$9,516 29
For 1896-97	9,590 82
For 1897-98	7,807 78

GENERAL APPROPRIATION.

Expenditure for fiscal year ending January 31, 1899.

	1898-99.
Salaries: General administration	\$128,109 74
“ Sunday and evening force	17,166 98
Binding: Salaries	12,607 57
“ Stock	1,499 48
“ Contract work	2,918 46
“ Equipment	419 66
Books	14,188 45
Periodicals	5,898 24
Furniture and fixtures	5,981 74
Gas	1,825 14
Electric lighting	1,968 74
* Supplies	2,416 13
Cleaning	7,404 85
Printing: Equipment	1,068 02
“ Stock	2,601 24
“ Contract work	1,547 31
“ Salaries	4,806 19
* Stationery	2,023 91
Typewriting	261 83
Fuel	6,789 78
Rents	5,600 00
Repairs	7,079 41
Freights and cartage	751 66
Transportation between Central Library and Branches	3,573 17
Delivery stations	4,030 40
Travelling expenses	495 90
Postage and telegrams	1,054 52
Water rates	1,718 60
Telephone service	334 60
Examination of accounts	300 00
Advertising	326 75
Insurance	135 00
Grounds	2 40
	\$246,855 87

The cost of maintaining the branches makes part of the general items of the several appropriations:

Cost of Branches, 1898-99 \$59,913 71

The amount expended for newspapers, books, and binding (not included above) paid from trust funds and city money in hands of London bankers:

For 1898-99 \$8,782 84

The amount expended for books (not included above) paid from trust funds in hands of City Treasurer \$8,271 41

* These items cannot be compared with the similar items of the three preceding years, because the classification has been changed to agree with that adopted by the City Auditor.

SPECIAL APPROPRIATIONS.

Library Building, Dartmouth street, balance of appropriation, February 1, 1898	\$76,430 62
Appropriation, May 27, 1898 (Chapter 475, Acts 1898)	100,000 00
	<u>\$176,430 62</u>

Payments on account of alterations :

Masonry, Connery & Wentworth	\$44,291 85
Iron work, Smith & Lovett	6,487 00
Ventilating system, Lynch & Woodward	6,053 44
Electrical work, Public Buildings Department	3,541 03
Architects' services, A. S. Jenney and T. A. Fox	1,871 41
Expert service in heating and ventilating, S. Homer Woodbridge	948 95
Decorating, Elmer E. Garnsey	1,550 00
Plumbing, Isaac N. Tucker	719 10
Carriers, Lamson Store Service Company	670 00
One hand lift	125 00
Carpentry and small items	56 84
	<u>66,314 62</u>

Balance, February 1, 1899 \$110,116 00

The balance will be required to settle outstanding contracts and claims.

Library Building, furnishing, balance of city appropriation, February 1, 1898 \$15,730 01

Payments on account :

Mellish & Byfield Company	\$1,415 40
J. H. Pray, Sons & Co.	513 36
A. B. & E. L. Shaw, designs for furniture	242 77
Foster Brothers	115 00
Sundry small accounts	107 27
	<u>2,393 80</u>

Balance, February 1, 1899 \$13,336 21

Branch Library, Broadway Extension, improvements, balance of appropriation, February 1, 1898 \$3,989 56

Payments on account :

Books	\$457 48
Periodicals	31 05
Furniture and fixtures	36 65
Repairs	7 50
	<u>532 68</u>

Balance, February 1, 1899 \$3,456 88

LONDON ACCOUNTS.

	Balances from 1897-98.	Interest, 1897-99.	Total Credits.	Expendi- tures, 1898-99.	Balances to 1899-1900.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
J. S. Morgan & Co.,	5,597 13 11	.....	5,756 15 8	1,807 3 6	3,949 12 2
J. S. Morgan & Co., Interest .....	.....	159 1 9			
J. S. Morgan & Co., photograph fund,	8 13 11	.....	8 13 11	.....	8 13 11
Baring Bros. & Co.,	15 0 0	.....	15 0 0	.....	15 0 0
	5,621 7 10	159 1 9	5,780 9 7	1,807 3 6	3,973 6 1

GENERAL EXHIBIT OF APPROPRIATIONS, SOURCES OF REVENUE AND OTHER FUNDS.

	Balances from 1897-98.	Revenue Received dur- ing the year 1898-99.	Appropriations.	Total Credits.	Expenditures for 1898-99.	Balances to 1899-1900.
Library Building, Dartmouth street.....	\$76,430 62	.....	\$100,000 00	\$176,430 62	\$66,314 62	\$110,116 00
Library Building, Dartmouth street.....	15,730 01	.....	.....	15,730 01	2,393 80	13,336 21
General Library.....	356 89	.....	246,498 98	246,855 87	*246,855 87	.....
Trust Funds, Inc.....	4,868 00	.....	.....	16,174 67	8,271 41	7,903 26
Branch Library, Broadway Extension.....	3,989 56	.....	.....	3,989 56	532 68	3,456 88
Bust of General Walker.....	2,500 00	.....	.....	2,500 00	.....	2,500 00
Exchange Account; lost books, sales of duplicates, etc.....	1,036 42	.....	.....	1,358 39	.....	1,358 39
W. C. Ford.....	310 04	.....	.....	310 04	.....	.....
Woman's Education Association.....	1 87	.....	.....	1 87	.....	.....
Fine Arts Fund (photographs).....	85 21	.....	.....	85 21	43 00	42 21
Elizabeth Lewis.....	8 50	200 36	.....	208 76	208 75	01
Boston Numismatic Society.....	300 00	.....	.....	300 00	62 87	237 13
Old South Church Society.....	.....	30 00	.....	30 00	30 00	.....
Lillian Whiting.....	.....	25 00	.....	25 00	.....	25 00

*The above sum (\$246,855.87) does not include the expenditures for books and binding made by draft on J. S. Morgan & Co., London, amounting to \$3,752.84.

RECEIPTS FROM FINES, SALES OF CATALOGUES, LOST CARDS, ETC.

Fines.....	1898-99.
Catalogues.....	\$4,681 05
Lost cards.....	282 82
Rent from Old Library Building.....	88 45
Storage of bicycles.....	500 00
Money found.....	26 95
	2 81
Total amount paid to City Collector.....	\$5,532 08

STATEMENT OF TRUST FUNDS.

GIVER.	Principal.	Balances from 1897-98.	Income, 1898-99.	Total Credits.	Expenditures, 1898-99.	Balances to 1899-1900.	Over- expended.
1. Joshua Bates.....	\$50,000 00	\$2,058 16	\$2,000 00	\$4,058 16	\$2,506 08	\$1,552 08	
2. Jonathan Phillips.....	30,000 00	3,354 82	1,600 00	4,954 82	2,379 96	2,574 86	
3. Abbott Lawrence.....	10,000 00	2,218 36	600 00	2,818 36	1,462 89	1,355 47	
4. Charlotte Harris.....	10,000 00	4,888 21	400 00	5,288 21	1,470 03	3,818 18	
5. Henry L. Pierce.....	5,000 00	379 74	200 00	579 74	152 40	427 34	
6. Mary P. Townsend.....	4,000 00	673 07	200 00	873 07	190 75	682 32	
7. George Ticknor.....	4,000 00	.....	160 00	146 73	30 34	116 39	
8. John P. Bigelow.....	1,000 00	280 00	40 00	320 00	70 54	249 46	
9. Franklin Club.....	1,000 00	86 83	40 00	126 83	3 71	123 12	
10. Samuel A. Green.....	2,000 00	296 57	95 00	391 57	150 40	241 17	
11. South Boston.....	100 00	.....	4 00	.....	.....	.....	* \$21 03
12. Arthur Scholfield.....	50,000 00 }	3,549 24	2,472 00	6,021 24	2,744 59	3,276 65	
13. Joseph Scholfield.....	11,800 00 }	.....	.....	.....	.....	.....	
14. Thomas B. Harris.....	1,000 00	121 85	40 00	161 85	.....	161 85	
15. Daniel Treadwell.....	6,950 00	242 87	513 00	755 87	358 51	397 36	
16. Edward Lawrence.....	500 00	55 11	20 00	75 11	.....	75 11	
17. J. Ingersoll Bowditch.....	10,000 00	1,018 21	350 00	1,368 21	188 39	1,179 82	

18. Family of Charles Greely Loring.....	500 00	40 00	20 00	60 00	.....	60 00
19. Charles Mead.....	2,500 00	100 00	100 00	200 00	.....	200 00
20. Victorine T. Artz.....	10,000 00	113 15	400 00	513 15	59 21	453 94
21. Papyrus Club.....	1,000 00	20 00	40 00	60 00	.....	60 00
22. Twentieth Regiment Association.....	5,000 00	.....	190 46	190 46	69 91	120 55
23. William C. Todd.....	50,000 00	.....	1,787 21	1,787 21	1,886 40	.....
24. Caleb D. Bradlee.....	1,000 00	.....	35 00	35 00	.....	35 00
	\$267,350 00	\$19,496 19	\$11,306 67	\$30,785 59	\$13,674 11	\$17,160 67
						\$89 22

* Over-expenditure of previous years \$35.03 less amount of income for 1898.

EXPENDITURES FOR BRANCHES AND DELIVERY STATIONS, 1887-99.

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92. 9 mos.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.
EAST BOSTON.												
Salaries.....	\$3,148 96	\$2,877 60	\$2,649 15	\$2,643 83	\$1,878 10	\$2,588 49	\$2,528 49	\$2,835 31	\$2,814 68	\$2,891 92	\$2,849 07	\$3,099 05
Books.....	422 12	384 28	338 22	255 55	417 68	513 79	288 87	359 85	842 14	920 38	763 00	846 61
Expense.....	684 14	698 73	483 02	999 90	604 96	757 05	764 83	621 15	609 45	709 53	713 06	843 69
	\$4,255 22	\$3,960 61	\$3,470 39	\$3,890 28	\$2,900 74	\$3,859 33	\$3,582 19	\$3,816 31	\$4,286 27	\$4,521 83	\$4,325 13	\$4,789 35
SOUTH BOSTON.												
Salaries.....	\$3,516 63	\$3,394 05	\$3,057 13	\$2,904 60	\$2,396 95	\$3,380 11	\$2,996 30	\$3,271 93	\$3,249 45	\$3,498 40	\$3,626 70	\$3,681 64
Books.....	763 17	774 93	642 08	448 46	707 85	783 56	573 23	771 37	898 75	1,819 38	873 32	876 70
Expense.....	518 60	3,620 83	2,748 16	3,172 57	3,102 20	3,054 57	3,328 14	3,142 26	3,624 76	3,804 63	3,178 25	3,102 49
	\$4,798 40	\$7,693 51	\$6,447 37	\$6,525 63	\$6,117 00	\$7,227 24	\$6,897 67	\$7,185 56	\$7,772 96	\$9,122 41	\$7,678 27	\$7,660 83
ROXBURY.												
Salaries.....	\$3,724 58	\$3,514 01	\$3,336 47	\$3,154 69	\$2,391 35	\$3,382 30	\$3,121 85	\$3,262 95	\$3,161 55	\$3,447 72	\$3,475 98	\$3,380 47
Books.....	726 40	675 76	457 34	452 94	442 75	774 26	396 77	494 49	658 42	1,332 09	436 75	9 05
Expense.....	1,176 32	2,639 52	2,434 61	2,725 27	2,675 43	2,310 20	2,457 53	2,526 12	3,000 15	2,678 90	2,371 12	2,745 09
	\$5,627 30	\$7,129 29	\$6,228 42	\$6,332 90	\$5,419 53	\$6,466 76	\$6,476 15	\$6,283 56	\$6,820 12	\$7,458 71	\$6,883 85	\$6,134 61
CHARLESTOWN.												
Salaries.....	\$2,848 01	\$2,654 77	\$2,623 67	\$2,738 52	\$1,950 18	\$2,608 83	\$2,201 90	\$2,596 88	\$2,397 53	\$3,008 51	\$2,845 22	\$2,809 99
Books.....	733 84	672 11	583 39	604 78	375 17	689 15	386 00	423 64	835 91	1,256 10	646 11	520 41
Expense.....	909 38	924 80	871 99	868 86	872 93	974 89	1,105 35	788 05	913 62	1,035 78	855 24	913 31
	\$4,491 23	\$4,351 68	\$4,079 05	\$4,212 16	\$3,198 28	\$4,272 87	\$3,693 25	\$3,806 57	\$4,147 06	\$5,300 39	\$4,346 57	\$4,243 71

BRIGHTON.

Salaries.....	\$1,713 34	\$1,613 39	\$1,592 55	\$1,562 20	\$1,134 87	\$1,758 88	\$1,687 77	\$1,872 00	\$1,888 00	\$2,040 75	\$2,117 97	\$2,260 38
Books.....	338 02	264 50	188 53	96 44	214 44	172 61	126 80	254 54	741 00	1,063 73	752 22	543 95
Expense.....	749 61	846 90	953 55	1,202 97	1,111 39	778 21	1,048 23	584 80	592 89	1,218 05	844 74	1,986 18
	\$2,800 97	\$2,724 79	\$2,734 63	\$2,862 11	\$2,460 70	\$2,709 70	\$2,862 80	\$2,711 34	\$3,231 89	\$4,322 53	\$3,714 93	\$4,790 51
DORCHESTER.												
Salaries.....	\$2,840 83	\$2,622 80	\$2,344 51	\$2,129 31	\$1,627 12	\$1,932 46	\$1,918 94	\$2,067 41	\$2,211 16	\$2,631 33	\$2,663 31	\$2,767 01
Books.....	734 69	673 10	425 95	233 67	386 22	422 04	331 33	464 05	806 03	1,310 70	704 82	580 92
Expense.....	603 96	804 76	966 74	1,015 23	557 83	703 60	632 50	488 00	700 25	687 57	661 08	634 39
	\$4,179 48	\$4,100 66	\$3,737 20	\$3,438 21	\$2,571 17	\$3,058 10	\$2,882 77	\$3,019 46	\$3,717 44	\$4,089 60	\$4,029 21	\$3,982 32
SOUTH END.												
Salaries.....	\$2,526 84	\$2,301 87	\$2,246 81	\$2,186 75	\$1,544 40	\$2,351 93	\$1,869 93	\$2,127 27	\$2,239 76	\$2,344 25	\$2,352 67	\$2,405 67
Books.....	451 90	500 22	485 78	321 87	514 80	733 67	538 01	467 74	574 76	1,254 04	738 20	534 24
Expense.....	385 97	900 14	906 79	602 46	910 43	533 51	1,128 38	684 28	537 32	465 21	659 96	911 36
	\$3,364 71	\$3,702 23	\$3,639 38	\$3,111 08	\$2,969 63	\$3,619 11	\$3,536 32	\$3,279 29	\$3,351 84	\$4,063 50	\$3,780 83	\$3,851 27
JAMAICA PLAIN.												
Salaries.....	\$2,028 35	\$1,854 50	\$1,834 65	\$1,675 13	\$1,270 20	\$1,974 97	\$1,677 67	\$1,943 57	\$2,023 52	\$2,069 35	\$2,131 85	\$2,156 42
Books.....	542 25	601 69	365 57	374 05	589 54	667 83	263 37	349 96	723 58	1,174 27	763 37	605 58
Expense.....	1,609 97	888 55	884 67	838 17	774 14	795 11	1,023 75	839 10	702 25	836 26	841 30	837 94
	\$4,180 57	\$3,344 74	\$3,084 89	\$2,887 35	\$2,633 88	\$3,437 91	\$2,964 79	\$3,132 63	\$3,449 35	\$4,110 48	\$3,736 52	\$3,590 94
NORTH END.												
Salaries.....	\$1,426 31	\$1,326 00	\$1,284 00	\$1,416 50	\$1,025 75	\$1,331 50	\$1,389 00	\$1,529 41	(6 mos.) \$658 83			
Books.....	28 80	81 10	77 27	85 03	252 10	128 66	148 24	122 35	11 38			
Expense.....	427 44	957 77	1,154 60	1,025 64	1,290 02	665 59	752 02	618 19	412 59			
	\$1,882 55	\$2,364 87	\$2,515 87	\$2,527 17	\$2,567 87	\$2,135 75	\$2,289 26	\$2,269 95	\$1,082 80			

EXPENDITURES FOR BRANCHES AND DELIVERY STATIONS. — *Continued.*

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92. (9 mos.)	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.
LOWER MILLS.												
Salaries	\$415 11	\$372 00	\$343 00	\$274 00	\$210 00	\$312 00	\$288 00	\$312 00	\$336 00	\$453 67	\$448 00	\$448 00
Books and Periodicals	64 00	64 85	53 72	52 71	58 57	56 21	71 81	53 65	214 36	75 55	65 59	67 05
Expense	329 74	350 17	307 32	305 25	263 20	254 46	572 74	460 25	318 38	395 22	256 28	427 24
MATTAPAN.												
Salaries	\$808 85	\$767 02	\$704 04	\$631 96	\$531 77	\$622 67	\$932 55	\$825 90	\$868 74	\$924 44	\$769 87	\$942 29
Books and Periodicals	\$139 61	\$130 00	\$120 00	\$25 00	.....	.....	.....	.....	\$305 86	\$424 17	\$448 00	\$448 00
Expense	160 11	180 08	170 59	276 31	.....	.....	.....	.....	.....	264 95	77 25	81 15
NEPONSET.												
Salaries	\$299 72	\$310 08	\$290 59	\$301 31	\$226 07	\$341 32	\$364 40	\$359 41	426 64	356 98	355 13	364 83
Expense	\$139 61	\$130 00	\$120 00	\$100 00	\$87 56	\$120 00	\$97 50	.....	\$732 50	\$1,046 10	\$880 38	\$893 98
ROSLINDALE.												
Salaries	206 89	243 47	248 65	234 80	124 45	268 15	184 05	\$353 35	\$320 34	\$300 81	\$372 86	\$344 04
Expense	\$346 50	\$373 47	\$368 65	\$334 80	\$212 01	\$388 15	\$281 55	\$353 35	\$320 34	\$300 81	\$372 86	\$344 04
WEST ROXBURY.												
Salaries	\$96 19	\$91 00	\$84 00	\$45 46	.....	.....	.....	.....	\$459 83	\$604 97	\$774 17	\$725 46
Expense	154 40	148 45	141 40	288 27	\$267 04	\$339 32	\$371 80	\$459 83	\$488 18	\$604 97	\$774 17	\$725 46
WEST ROXBURY.												
Salaries	\$250 59	\$239 45	\$225 40	\$333 73	\$267 04	\$339 32	\$371 80	\$459 83	\$488 18	\$604 97	\$774 17	\$725 46
Books and Periodicals	\$146 38	\$131 11	\$124 63	\$120 62	\$78 50	\$140 80	\$226 50	\$338 97	\$377 00	\$598 40	\$762 45	\$859 76
Expense .....	.....	.....	.....	.....	.....	.....	35 00	17 60	454 20	1,252 19	257 94	193 76

LIBRARY DEPARTMENT.

Expense	447 95	92 05	89 05	75 00	84 25	206 37	323 62	264 58	359 69	431 56	470 31	412 77
MOUNT BOWDOIN.	\$304 33	\$223 16	\$213 68	\$196 22	\$162 75	\$347 17	\$685 12	\$621 15	\$1,190 89	\$2,282 15	\$1,490 70	\$1,466 29
Salaries.....	\$287 61	\$298 22	\$538 00	\$276 00	\$201 25	\$208 25	\$276 00	\$204 00	\$322 00	\$453 38	\$448 00	\$448 00
Periodicals.....	43 90	132 31	123 79	108 12	78 07	80 57	87 98	68 20	255 31	87 15	73 45	75 40
Expense.....	136 12	448 14	511 21	480 95	346 70	462 29	479 00	423 79	427 36	514 78	524 14	503 18
ALLISTON.	\$467 63	\$878 67	\$1,233 00	\$865 07	\$626 02	\$841 11	\$842 98	\$785 99	\$1,004 67	\$1,055 31	\$1,045 59	\$1,096 58
Salaries.....			\$235 30	\$48 00								
Expense			114 16	288 46	\$276 30	\$380 60	\$265 30	\$381 21	\$403 03	\$466 56	\$510 47	\$467 60
ASHMONT.				\$384 46	\$276 30	\$380 60	\$395 90	\$381 21	\$403 03	\$466 56	\$510 47	\$467 60
Expense.....				\$220 44	\$193 47	\$245 71	\$379 16	\$371 48	\$359 00	\$386 88	\$363 91	\$461 09
DORCHESTER STATION.												
Expense				\$100 33	\$204 34	\$255 60	\$322 39	\$328 16	\$319 41	\$438 74	\$537 91	\$476 97
BIRD STREET.												
Expense.....						\$209 14	\$317 47	\$329 98	\$319 52	\$368 47	\$375 24	\$309 17
BLUE HILL AVENUE.												
Expense						\$202 28	\$361 09	\$332 07	\$336 25	\$620 88	\$552 24	\$622 20
HARVARD STREET.												
Expense.....						\$68 63	\$46 40	\$329 48				
CRESCENT AVENUE.												
Expense						\$53 68	\$326 85	\$329 48	\$463 80	\$398 15	\$476 03	\$399 61

BOYLSTON STATION.											
Expense.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(3 mos.) \$8 30	516 05
SCHOOL-HOUSES.											
Expense.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47 52	93 25
ENGINE-HOUSES.											
Expense.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71 41	98 10
UNION PARK ST.											
Salaries.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(5 weeks) \$48 75
Expense.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
										\$49 01	
										\$60,446 39	

This total covers the payments amounting to \$532.68 made from the special appropriation for "Broadway Extension Improvements."

EXPENDITURES FOR BRANCHES AND DELIVERY STATIONS.—*Concluded.*
Summary.

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92. (9 mos.)	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.
East Boston...	\$4,255 22	\$3,960 61	\$3,470 39	\$3,869 28	\$2,900 74	\$3,859 33	\$3,582 19	\$3,816 31	\$4,266 27	\$4,521 83	\$4,325 13	\$4,789 35
South Boston .	4,798 40	7,699 51	6,447 37	6,525 63	6,117 00	7,227 14	6,897 67	7,185 56	7,772 96	9,122 41	7,678 27	7,660 83
Roxbury	5,627 30	7,129 29	6,228 42	6,332 90	5,419 53	6,466 76	6,476 15	6,283 56	6,820 12	7,458 71	6,883 85	6,134 61
Charlestown ..	4,491 23	4,251 68	4,079 05	4,212 16	3,198 28	4,272 87	3,633 25	3,806 57	4,147 06	5,300 39	4,346 57	4,243 71
Brighton	2,800 97	2,724 79	2,734 63	2,862 11	2,460 70	2,709 70	2,862 80	2,711 34	3,231 89	4,322 53	3,714 93	4,790 51
Dorchester	4,179 48	4,100 66	3,737 20	3,438 21	2,571 17	3,058 10	2,882 77	3,019 46	3,717 44	4,689 60	4,029 21	3,982 32
South End	3,364 71	3,702 23	3,639 38	3,111 08	2,969 63	3,619 11	3,536 32	3,279 29	3,351 84	4,003 50	3,780 83	3,851 27
Jamaica Plain	4,180 57	3,344 74	3,084 89	2,887 35	2,633 88	3,437 91	2,964 79	3,132 63	3,449 35	4,110 48	3,736 52	3,599 94
North End	1,882 55	2,364 87	2,515 87	2,527 17	2,567 87	2,125 75	2,289 26	2,269 95	1,082 80 (6 mos.)			
Lower Mills...	808 85	767 02	704 04	631 96	531 77	622 67	982 55	825 90	868 74	924 44	769 87	942 29
Mattapan	299 72	310 08	290 59	301 31	226 07	341 32	364 40	359 41	732 50	1,046 10	880 38	893 98
Neponset	346 50	373 47	368 65	334 80	212 01	388 15	281 55	353 35	320 34	390 81	372 86	344 04
Roslindale	250 59	239 45	225 40	333 73	267 04	339 32	371 80	459 83	438 18	604 97	774 17	725 46
West Roxbury	594 33	223 16	213 68	196 22	162 75	347 17	635 12	621 15	1,190 89	2,282 15	1,490 70	1,466 29
Mt. Bowdoin...	467 63	878 67	1,233 00	865 07	626 02	841 11	842 98	785 99	1,004 67	1,055 31	1,045 59	1,026 58
Allston .....	.....	.....	349 46	334 46	276 30	380 60	395 90	381 21	403 03	466 56	510 47	467 60
Ashmont .....	.....	.....	.....	220 44	193 47	245 71	379 16	371 48	359 00	386 88	363 91	461 09
Dorch. Station	.....	.....	.....	100 33	204 34	255 60	322 39	328 16	319 41	438 74	537 91	476 97
Bird Street....	.....	.....	.....	.....	.....	299 14	317 47	329 98	319 52	368 47	375 24	309 17

Blue Hill Ave.,	202 28	361 09	332 07	336 25	620 88	532 24	522 29
Harvard St.,	68 63	46 40	329 48				
Crescent Ave.,	53 58	326 85	329 48	463 80	338 15	476 08	339 61
No. Brighton,		113 51	1,043 35	1,074 95	1,028 91	1,108 37	1,024 47
West End ,	17 60			{ 934 62 { (4 mos.)	7,958 68	7,553 08	7,342 79
Upham's Cor.,					{ 401 06 { (9 mos.)	673 09	643 77
Broadway Ex.,					1,348 36	2,262 91	2,394 97
Warren St.,					{ 379 32 { (8 mos.)	677 18	649 56
Rox. Crossing,						{ 166 34 { (11 mos.)	606 60
Boylston Sta.,						{ 88 30 { (3 mos.)	516 05
School Houses,						47 52	98 25
Eng. Houses.						71 41	98 10
Union Park St.,						49 01	{ (5 weeks)
Total							\$60,446 39

LIBRARY TRUST FUNDS.

BIGELOW FUND.—This is a donation made by the late JOHN P. BIGELOW, in August, 1850, when Mayor of the city.

The income from this fund is to be appropriated to the purchase of books for the increase of the library.

Invested in one City of Boston Four per cent. Bond, for . \$1,000 00

Payable to the Chairman of the Committee on the Public Library for the time being.

BATES FUND.—This is a donation made by the late JOSHUA BATES of London, in March, 1853.

Invested in one City of Boston Four per cent. Bond, for . \$50,000 00

“The income only of this fund is to be, each and every year, expended in the purchase of such books of permanent value and authority as may be found most needful and most useful.” Payable to the Mayor of the city for the time being.

BOWDITCH FUND.—This is the bequest of J. INGERSOLL BOWDITCH. Invested in one City of Boston Three and one-half per cent.

Bond, for \$10,000 00

The whole income in each and every year to be expended in the purchase of books of permanent value and authority in mathematics and astronomy.

PHILLIPS FUND.—This is a donation made by the late JONATHAN PHILLIPS of Boston, in April, 1853.

Invested in one City of Boston Four per cent. Bond, for . \$10,000 00

The interest on this fund is to be used exclusively for the purchase of books for said library.

Also a bequest by the same gentleman in his will, dated September 20, 1849.

Invested in one City of Boston Six per cent. Bond, for . \$20,000 00

The interest on which is to be annually devoted to the maintenance of a Free Public Library.

Both of these items are payable to the Mayor of the city for the time being.

ABBOTT LAWRENCE FUND.—This is the bequest of the late ABBOTT LAWRENCE of Boston.

Invested in one City of Boston Six per cent. Bond, for . \$10,000 00

The interest on this fund is to be exclusively appropriated for the purchase of books for the said library, having a permanent value.

EDWARD LAWRENCE FUND.—This is the bequest of the late EDWARD LAWRENCE of Charlestown. The following clause from his will explains its purpose :

“To hold and apply the income, and so much of the principal as they may choose, to the purchase of special books of reference to be kept and used only at the Charlestown Branch of said Public Library.”

Invested in one City of Boston Four per cent. Bond, for . \$500 00

PIERCE FUND.—This is a donation made by HENRY L. PIERCE, Mayor of the city, November 29, 1873, and accepted by the City Council December 27, 1873.

Invested in one City of Boston Four per cent. Bond, for . \$5,000 00

TOWNSEND FUND.—This is a donation from William Minot and William Minot, Jr., executors of the will of MARY P. TOWNSEND, of Boston, at whose disposal she left a certain portion of her estate in trust, for such charitable and public institutions as they may think meritorious. Said executors accordingly selected the Public Library of the City of Boston as one of such institutions, and attached the following conditions to the legacy: "The income only shall, in each and every year, be expended in the purchase of books for the use of the library; each of which books shall have been published in some one edition at least five years at the time it may be so purchased."

Invested in one City of Boston Five per cent. Bond, for . \$4,000 00

TICKNOR BEQUEST.—By the will of the late GEORGE TICKNOR of Boston he gave to the City of Boston, on the death of his wife, all his books and manuscripts in the Spanish and Portuguese languages, about four thousand volumes, and also the sum of four thousand dollars. After the receipt of said sum, the city is required to spend not less than one thousand dollars in every five years during the twenty-five years next succeeding (*i.e.*, the income of four thousand dollars, at the rate of five per cent. per annum), in the purchase of books in the Spanish and Portuguese languages and literature. At the end of twenty-five years the income of the said sum is to be expended annually in the purchase of books of permanent value, either in the Spanish or Portuguese language, or in such other languages as may be deemed expedient by those having charge of the library. These books, bequeathed or purchased, are always to be freely accessible for reference or study, but are not to be loaned for use outside of the library building. If these bequests are not accepted by the city, and the trust and conditions faithfully executed, the books, manuscripts and money are to be given to the President and Fellows of Harvard College.

In order that the city might receive the immediate benefit of this contribution, Anna Ticknor, widow of the donor, relinquished her right to retain during her life the books and manuscripts, and placed them under the control of the city, the City Council having previously accepted the bequests, in accordance with the terms and conditions of said will, and the Trustees of the Public Library received said bequests on behalf of the city, and made suitable arrangements for the care and custody of the books and manuscripts.

Invested in one City of Boston Four per cent. Bond, for . \$4,000 00

FRANKLIN CLUB FUND.—This is a donation made in June, 1863, by a literary association of young men in Boston, who, at the dissolution of the association, authorized its trustees, Thomas Minns, John J. French and J. Franklin Reed, to dispose of the funds on hand in such a manner as to them should seem judicious. They elected to bestow it on the Public Library, attaching to it the following conditions: "In trust that the income, but the income only, shall, year by year, be expended in the purchase of books of permanent value for the use of the free Public Library of the city, and as far as practicable, of such a character as to be of special interest to young men." The Trustees expressed a preference for books relative to Government and Political Economy.

Invested in one City of Boston Four per cent. Bond, for . \$1,000 00

TREADWELL FUND.—By the will of the late DANIEL TREADWELL, of Cambridge, late Rumford Professor in Harvard College, who died February 27, 1872, he left the residue of his estate, after payment of debts, legacies, etc., in trust to his executors, to hold during the life of his wife for her benefit, and after her decease to divide the residue then remaining in the hands of the trustees as therein provided, and convey one-fifth part thereof to the Trustees of the Public Library in the City of Boston.

The City Council accepted said bequest, and authorized the Trustees of the Public Library to receive the same, and to invest it in the City of Boston Bonds, the income of which is to be expended by said trustees, in such manner as they may deem for the best interests of the Library.

Invested in the City of Boston Four per cent. Bonds, for .	\$5,550 00
Invested in the City of Boston Three and one-half per cent. Bonds, for .	1,400 00
Invested in 16 shares B. & A. R.R. Co. stock, par value \$100 each .	1,600 00
Invested in 6 shares B. & P. R.R. Co. stock, par value \$100 each .	600 00
Invested in 12 shares Fitchburg R.R. Co. stock, par value \$100 each .	1,200 00
Invested in 1 share Vt. & Mass. R.R. Co. stock, par value \$100 each .	100 00
	<u>\$10,450 00</u>

CHARLOTTE HARRIS FUND.—Bequest of CHARLOTTE HARRIS, late of Boston, the object of which is stated in the following extract from her will:

“I give to the Charlestown Public Library \$10,000, to be invested on interest, which interest is to be applied to the purchase of books published before 1850. I also give to said Public Library my own private library, and the portrait of my grandfather, Richard Devens.” Bequest accepted by City Council, July 31, 1877.

Invested in one City of Boston Four per cent. Bond, for .	<u>\$10,000 00</u>
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THOMAS B. HARRIS FUND.—Bequest of THOMAS B. HARRIS, late of Charlestown, for the benefit of the Charlestown Public Library.

Invested in one City of Boston Four per cent. Bond, for .	<u>\$1,000 00</u>
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SCHOLFIELD FUND.—Bequest of the late ARTHUR SCHOLFIELD, who died in New York, January 17, 1883. The interest to be paid to certain heirs during their lives, and then to be used for the purchase of books of permanent value. The last heir, Joseph Scholfield, died November 18, 1889, and by his will bequeathed to the City of Boston the sum of \$11,800, which represents the income of said fund, received by him up to the time of his death, to be added to the fund given by his brother.

Invested in one City of Boston Four per cent. Bond, for .	\$50,000 00
“ “ “ “ “ “ .	11,800 00
	<u>\$61,800 00</u>

GREEN FUND.—Donations of Dr. SAMUEL A. GREEN, of \$2,000, the income of which is to be expended for the purchase of books relating to American history.

Invested in two City of Boston Five per cent. Bonds, for .	\$1,500 00
Invested in one City of Boston Four per cent. Bond, for .	500 00
	<u>\$2,000 00</u>

SOUTH BOSTON BRANCH LIBRARY TRUST FUND.—Donation of a citizen of South Boston, the income of which is to be expended for the benefit of the South Boston Branch Library.

Invested in City of Boston Four per cent. Bond, for . .	<u>\$100 00</u>
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CHARLES GREELY LORING MEMORIAL FUND.—This is a donation from the family of Charles Greely Loring, the income of which is to be expended for the purchase of books for the West End Branch.

Invested in one City of Boston Four per cent. Bond, for . . . \$500 00

CHARLES MEAD PUBLIC LIBRARY TRUST FUND.—Received from Charles Mead, executor of the estate of Charles Mead, the amount of legacy of the late Charles Mead, to constitute the "CHARLES MEAD PUBLIC LIBRARY TRUST FUND," for the promotion of the objects of the Public Library, in such manner as the government of said library shall deem best, and so far as the government shall deem consistent with the objects of the library, to be used for the benefit of the South Boston Branch Library.

Invested in one City of Boston Four per cent. Bond, for . . . \$2,500 00

ARTZ FUND.—This is a donation made in November, 1896, by Miss VICTORINE THOMAS ARTZ of Chicago, the income "to be employed in the purchase of valuable, rare editions of the writings, either in verse or prose, of American and of foreign authors." These books are to be known as the "Longfellow Memorial Collection."

Invested in one City of Boston Four per cent. Bond, for . . . \$10,000 00

JOHN BOYLE O'REILLY MEMORIAL FUND.—Received from the members of the Papyrus Club, May, 1897. The income thereof is to be expended for the purchase of books in memory of their late member, JOHN BOYLE O'REILLY.

Invested in one City of Boston Four per cent. Bond, for . . . \$1,000 00

TWENTIETH REGIMENT MEMORIAL FUND.—This is a donation made in April, 1897, by the Association of Officers of the Twentieth Massachusetts Volunteer Infantry. It is to be used for the purchase of books of a military and patriotic character, to be placed in the alcove appropriated as a memorial of the Twentieth Regiment.

Invested in one City of Boston Four per cent. Bond, for . . . \$5,000 00

TODD FUND.—This is a gift made in October, 1897, by WM. C. TODD of New Hampshire. The income is to be expended annually in payment for such current newspapers of this and other countries as the board of officers for the time being having charge of the Public Library of the City of Boston, shall purchase.

Invested in one City of Boston Four per cent. Bond, for . . . \$50,000 00

BRADLEE FUND.—A bequest of the late Rev. CALEB DAVIS BRADLEE to the Boston Public Library.

Invested in one City of Boston Three and one-half per cent. Bond \$1,000 00

HENRY SARGENT CODMAN MEMORIAL FUND.—This is a contribution from the friends of the late Henry Sargent Codman to be used to perpetuate the memory of Mr. Codman by the purchase of books upon landscape gardening. It is the desire of the subscribers that a special book-plate shall be inserted in each one of the volumes purchased, identifying it as part of the memorial collection.

Cash in City Treasury, January 31, 1899 \$2,852 41

RECAPITULATION OF PUBLIC LIBRARY TRUST FUNDS.

Scholfield Fund	\$61,800 00
Bates Fund	50,000 00
Todd Fund	50,000 00
Phillips Fund	20,000 00
Phillips Fund	10,000 00
Bowditch Fund	10,000 00
Charlotte Harris Fund	10,000 00
Abbott Lawrence Fund	10,000 00
Treadwell Fund	10,487 69
Artz Fund	10,000 00
Twentieth Regiment Memorial Fund	5,000 00
Pierce Fund	5,000 00
Townsend Fund	4,000 00
Ticknor Fund	4,000 00
Charles Mead Fund	2,500 00
Green Fund	2,000 00
Bigelow Fund	1,000 00
Thomas B. Harris Fund	1,000 00
Franklin Club Fund	1,000 00
John Boyle O'Reilly Memorial Fund	1,000 00
Bradlee Fund	1,000 00
Edward Lawrence Fund	500 00
Charles Greely Loring Memorial Fund	500 00
South Boston Branch Library Trust Fund	100 00
Codman Memorial Fund	2,852 41
	\$273,740 10

LIBRARY TRUST FUNDS.—INVESTED IN CITY OF BOSTON BONDS.

GIVEN.	Amount.	When received.	No. of Bond.	When due.	Income.	Provisions.
1 Joshua Bates.....	\$50,000 00	March, 1853	8,104	April, 1913	\$2,000	To buy "books of permanent value."
2 Jonathan Phillips.....	20,000 00	April, 1861	352	Jan'y, 1906	1,600	"To the maintenance of a free public library."
3 Abbott Lawrence.....	10,000 00	April, 1852	8,105	April, 1913		"Purchase of books."
4 Charlotte Harris.....	10,000 00	May, 1860	281	July, 1906	600	Books having a permanent value.
5 Henry L. Pierce.....	10,000 00	August, 1877	10,767	Oct., 1917	400	Books for Charlestown branch, published before 1850.
6 Mary P. Townsend.....	5,000 00	December, 1873	7,992	Jan'y, 1924	200	"Books of permanent value for the Bates Hall."
7 George Ticknor.....	4,000 00	April, 1879	2,960	April, 1890	200	Books five years old in some one edition.
8 John P. Bigelow.....	4,000 00	April, 1879	2,968	Oct., 1920	160	Books in Spanish and Portuguese five years old in some one edition.
9 Franklin Club.....	1,000 00	August, 1850	8,106	April, 1913	40	Purchase of books.
	1,000 00	June, 1863	1,224	Jan'y, 1914	40	Books of permanent value, preferably "books on government and political economy."
10 Samnel A. Green.....	1,500 00	November, 1878	3,714	Oct., 1900	75	Books relating to American history.
	500 00	April, 1884	722	April, 1908	20	
11 South Boston.....	100 00	September, 1879	1,243	April, 1914	4	For benefit of South Boston Branch.
12 Arthur Scholfield.....	50,000 00	December, 1883	5,596	July, 1919	2,000	To be used for books of permanent value.
13 Joseph Scholfield.....	11,800 00	December, 1883	1,223	Oct., 1913	472	
14 Thomas B. Harris.....	1,000 00	July, 1890	6,300	July, 1920	40	For benefit of Charlestown Branch.
	2,000 00	April, 1884	1,244	April, 1914		
	1,700 00	October, 1885	1,282	April, 1916		
15 Daniel Treadwell.....	1,400 00	October, 1885	1,486	Oct., 1917	271	To be expended by the Trustees in such manner as they may deem for the best interest of the Library.
	1,000 00	November, 1889	1,754	Nov., 1919		
	350 00	July, 1892	2,210	Oct., 1921		
	500 00	January, 1896	2,452	Oct., 1923		
16 Edward Lawrence.....	500 00	May, 1886	9,381	Jan'y, 1916	20	"To hold and apply the income and so much of the principal as they [the Trustees] may choose to the purchase of special books of reference to be kept and used only at the Charlestown Branch of said Public Library."
17 J. Ingersoll Bowditch.....	10,000 00	May, 1886	1,383	April, 1916	350	For "the purchase of books of permanent value and authority in mathematics and astronomy," to be added to the Bowditch collection.
18 { Family of Charles Greely Loring }	500 00	January, 1896	1,816	Jan'y, 1920	20	Memorial Fund from the income of which books are to be bought for the West End Branch.
19 Charles Mead.....	2,500 00	January, 1896	9,479	Jan'y, 1916	100	"For the promotion of the objects of the Public Library in such manner as the government of said library shall deem best, and so far as the government shall deem consistent with the objects of the library, to be used for the benefit of the South Boston Branch Library."
20 Victorine T. Artz.....	10,000 00	October, 1896	10,304	Jan'y, 1917	400	For the purchase of valuable and rare editions of the writings, either in prose or verse, of American and of foreign authors, "to be known as the Longfellow Memorial Collection."
21 Papyrus Club.....	1,000 00	November, 1896	10,305	Jan'y, 1917	40	John Boyle O'Reilly Memorial Fund "for the purchase of books."
22 Twentieth Regiment Ass'n.....	1,000 00	May, 1897	10,531	July, 1917	200	"For the purchase of books of a military and patriotic character, to be placed in the alcove appropriated as a Memorial of the Twentieth Regiment."
23 Wm. C. Todd.....	50,000 00	April, 1897	10,785	Oct., 1917	2,000	The income to be expended annually for current newspapers, foreign and domestic.
24 Caleb D. Bradlee.....	50,000 00	October, 1897	10,890	Oct., 1927	35	Unrestricted.
	1,000 00	November, 1897	11,244	Jan., 1918		
	\$267,350 00				\$11,287	

MEMORANDA.

- (1) Joshua Bates, born near Boston, 1788, died in London, as the head of the house of Baring Brothers & Co., 1864. In addition to this fund, he gave \$50,000 worth of books to the Library.
- (2) The sum of \$10,000 was a gift in Mr. Phillips' lifetime. The other \$20,000 was bequeathed by his will, dated 28th of September, 1849. He died 26th July, 1860, aged 82.
- (3) Mr. Lawrence died in August, 1856, and this sum was a bequest.
- (4) The bequest of Charlotte Harris to the Charlestown Branch. With it her private library was also given.
- (5) The donation of Mayor Pierce, previous to his retirement from office. The principal or interest may be expended as is deemed best.
- (6) This fund was received from William Minot and William Minot, Jr., executors of Miss Townsend's will, to whom discretionary power in making the gift was given by the will.
- (7) This bequest accompanied the testamentary gift of his Spanish and Portuguese library. It required that \$1,000, at least, shall be spent every five years for twenty-five years for the addition of books to said library.
- (8) This fund was a sum intended for a testimonial to Mr. Bigelow on retiring from the mayoralty, and was transferred by him to this purpose.
- (9) Given by the Trustees of the Franklin Club, under the authority given them at the dissolution of that literary association.
- (10) Given by the family of the late Charles Greely Loring as a memorial fund from the income of which books are to be bought for the West End Branch.
- (11) Legacy of the late Charles Mead, to constitute the "Charles Mead Public Library Trust Fund."
- (12) Given by Victorine Thomas Artz, to constitute the "Longfellow Memorial Collection."
- (13) The donation of the Papyrus Club, in memory of John Boyle O'Reilly.
- (14) Given by the Twentieth Regiment Association, as a memorial of the Twentieth Regiment, Massachusetts Volunteer Infantry.
- (15) The gift of William C. Todd, to provide "free access to representative newspapers of the world."
- (16) The bequest of Caleb Davis Bradlee, D.D.

STOCKS AND CASH OTHER THAN CITY BONDS HELD BY TREADWELL FUND, PUBLIC LIBRARY.

SHARES.	Par value per Share.	Value per Share as received from Trustee.	Total as received from Trustee.	Income.	Remarks.
15 B. & A. R.R. Co.....	\$100 00	\$179 00	\$2,685 00	\$128 00	
6 B. & Prov. R.R. Co.....	100 00	179 50	1,077 00	60 00	
9 Fitchburg R.R. Co.....	100 00	118 00	1,062 00	48 00	April 5, 1887. The certificates of 9 shares of F. R.R. exchanged for a certificate of 12 shares preferred stock in same corporation, par value \$100. Total, \$1,200.
1 Vt. & Mass. R.R. Co.....	100 00	133 00	133 00	6 00	
Cash.....			88 00		
			Less 88 00		
			\$5,497 00		Less paid May 10, 1886, to City Collector, per order of Board of Trustees of Public Library.
1 B. & A. R.R. Co.....	100 00			100 00	
Cash in City Treasury.....				37 69	

¹ Includes income on the one share below.

APPENDIX II.

EXTENT OF THE LIBRARY BY YEARS.

YEARS.			YEARS.			YEARS.		
		Total volumes in the Libraries.			Total volumes in the Libraries.			Total volumes in the Libraries.
1	1852-53	9,688	17	1868-69	152,796	33	1884-85	453,947
2	1853-54	16,221	18	1869-70	160,573	34	1885	460,993
3	1854-55	22,617	19	1870-71	179,250	35	1886	479,421
4	1855-56	28,080	20	1871-72	192,958	36	1887	492,956
5	1856-57	34,896	21	1872-73	209,456	37	1888	505,872
6	1857-58	70,851	22	1873-74	260,550	38	1889	520,508
7	1858-59	78,043	23	1874-75	276,918	39	1890	536,027
8	1859-60	85,031	24	1875-76	297,873	40	1891	556,283
9	1860-61	97,386	25	1876-77	312,010	41	1892	576,237
10	1861-62	105,034	26	1877-78	345,734	42	1893	597,152
11	1862-63	110,563	27	1878-79	360,963	43	1894	610,375
12	1863-64	116,934	28	1879-80	377,225	44	1895	628,297
13	1864-65	123,016	29	1880-81	390,982	45	1896-97	663,768
14	1865-66	130,678	30	1881-82	404,221	46	1897-98	698,888
15	1866-67	136,080	31	1882-83	422,116	47	1898-99	716,050
16	1867-68	144,092	32	1883-84	438,594			

VOLUMES IN LIBRARY AND BRANCHES, JANUARY 31, 1899,
ACCORDING TO LOCATION.

Central Library		535,687	Brighton	13,886
Duplicate room		15,135	Charlestown	31,956
		550,822	Dorchester	15,413
			East Boston	11,814
			Jamaica Plain	12,496
			South Boston	14,912
			South End	13,909
			West End	10,825
			West Roxbury	4,322
			Lower Mills (Station A)	88
			Mattapan (Station D)	98
			Mt. Bowdoin (Station F)	992
			North Brighton (Station L)	76
			Broadway Ext. (Station P)	1,582
Roxbury branch	Fellowes Athenæum	19,461		
	Collection owned by City	13,398		
	Total, Roxbury branch	32,859		

APPENDIX III.

NET INCREASE OF THE SEVERAL DEPARTMENTS.

	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896-97.	1897-98.	1898-99.
Bates Hall.....	11,857	13,518	15,306	16,499	20,493	32,491	} 11,821	20,273	26,579	20,680
Lower Hall.....	710	1's 50	1's 23	818	loss 455	746				
Duplicate room	330	419	2,355	1's 9,143	loss 542	1's 8,056	313	2,890	8,603	2,063
Brighton branch	130	91	167	98	23	292	107	1,217	276	1's 3,190
Charlestown branch..	1's 70	283	421	22	339	300	loss 16	1's 112	398	2,095
Dorchester branch ...	309	269	222	209	134	358	loss 73	1,415	159	1's 1,402
East Boston branch..	63	58	59	5	48	126	112	1,021	147	1's 1,478
Jamaica Plain branch	294	150	214	112	221	329	273	1,277	374	1's 1,286
¹ North End branch ..	4	12	224	84	75	63	1's 1,861	.....	.....	.....
Roxbury branch	199	146	308	loss 352	147	382	48	1,202	1's 2,896	1's 1,628
Fellowes Athenæum	397	361	438	289	318	318	407	348	402	936
South Boston branch	159	115	200	51	55	401	loss 289	1,509	loss 69	113
South End branch....	248	187	365	loss 67	26	276	138	1,435	308	1's 683
West End branch ....	.....	.....	.....	.....	.....	1,897	6,522	1,555	385	466
W. Roxbury branch..	6	10	.....	.....	33	4	626	loss 8	185	169
Lower Mills Reading room .....	.....	.....	.....	.....	.....	.....	85	3	.....	.....
Mattapan Reading room .....	.....	.....	.....	.....	.....	.....	78	24	1	.....
Mt. Bowdoin Reading room .....	.....	.....	.....	.....	.....	.....	74	932	loss 30	16
North Brighton Reading room .....	.....	.....	.....	8	.....	.....	74	loss 7	.....	1
Broadway Extension Reading room.....	.....	.....	.....	.....	.....	.....	261	724	307	290
Total	14,636	15,519	20,256	8,633	20,915	29,927	18,695	35,698	35,129	17,162

¹ Collection transferred to West End branch.

APPENDIX III.—*Concluded.*

LOCATED FEBRUARY 1, 1898, to JANUARY 31, 1899.

	Located.	Condemned, missing, transferred.	Net gain.
Central Library.....	23,867	3,187	20,680
Central Library, Duplicate room.....	3,764	1,701	2,063
Brighton branch.....	523	3,713	loss 3,190
Charlestown branch.....	2,200	105	2,095
Dorchester branch.....	596	1,998	loss 1,402
East Boston branch.....	711	2,189	loss 1,478
Jamaica Plain branch.....	548	1,834	loss 1,286
Roxbury branch, city collection.....	63	1,691	loss 1,628
Roxbury branch, Fellowes Athenæum.....	975	39	936
South Boston branch.....	926	813	113
South End branch.....	525	1,208	loss 683
West End branch.....	551	85	466
West Roxbury branch.....	181	12	169
Lower Mills Reading room.....	.....	.....	.....
Mattapan Reading room.....	.....	.....	.....
Mt. Bowdoin Reading room.....	16	.....	16
North Brighton Reading room.....	1	.....	1
Broadway Extension Reading room.....	419	129	290
Total.....	35,866	18,704	17,162

VOLUMES IN THE SPECIAL COLLECTIONS.

	1882.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896-97.	1897-98.	1898-99.
Patent library	3,142	3,796	3,965	4,097	4,218	4,269	4,335	4,551	5,531	5,733	5,971	6,287	6,666
Bowditch library	3,224	4,706	4,935	5,225	5,348	5,509	5,026	5,717	6,003	6,077	6,192	6,279	6,349
Parker library	12,363	14,077	14,104	14,112	14,114	14,116	14,116	14,116	13,819	13,820	13,845	13,848	13,854
Prince library	2,274	2,775	2,824	2,905	2,935	2,953	3,000	3,025	12,045	2,045	2,045	2,045	2,047
Ticknor library	5,463	5,790	5,877	5,923	5,966	5,981	6,016	6,096	6,086	6,149	6,165	6,172	6,209
Barton library	13,487	13,841	13,755	13,724	13,735	13,740	13,764	13,775	13,624	13,627	213,491	13,491	13,491
Franklin library	240	403	416	427	446	465	482	499	565	578	582	591	598
Thayer library	893	1,280	1,368	1,427	1,500	1,500	3,984	5,269	5,383	5,384	5,385	5,385	5,388
John A. Lewis library .....	.....	.....	.....	John A. Lewis library .....	.....	596	617	621	679	679	679	679	681
Gilbert library .....	.....	.....	.....	.....	.....	.....	.....	420	422	422	422	422	422
Tosti library (1869, 129 vols.) .....	.....	.....	.....	.....	.....	.....	.....	.....	129	129	129	129	129
Hunt library (1877, 669 vols.) .....	.....	.....	.....	.....	.....	.....	.....	.....	669	669	669	669	669
John Adams library .....	.....	.....	.....	.....	.....	.....	.....	.....	2,819	2,819	2,819	2,819	2,819
Allen A. Brown library .....	.....	.....	.....	.....	.....	.....	.....	.....	6,382	6,990	7,671	7,745	7,874 (framed)
Chamberlain library .....	.....	.....	.....	.....	.....	.....	.....	.....	150	150	150	150	150
Military library .....	.....	.....	.....	.....	.....	.....	.....	.....	308	315	321	595	608
U. S. Congressional docs. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,629	3,763	3,884	4,043
Gr. Br. Parl. papers .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,476	6,584	6,696	6,702
Galatea library .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,184
Codman library .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	696
Artz library .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	624
Newspaper room .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,559
Browning collection .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	328

¹ Actual enumeration of original Prince library. Account is now made elsewhere of additions purchased by the city for this collection.

² There has been no loss in the Barton library, but a correction of an error of 138 previously made.

APPENDIX IV.

CENTRAL LIBRARY CLASSIFICATIONS.

CLASS NO.	CLASSES.	GENERAL COLLECTION.				SPECIAL LIBRARIES.																						Total, including special libraries.			
		Placed on shelves, found, etc. 1898.	Loss by counting, lost, missing, and destroyed.	Loss by transfer to other divisions.	Total in general library, Jan. 31, 1899.	1858.	1861.	1866.	1869.	1871.	1873.	1875.	1877.	1880.	1889.		1890.	1892.	1894.	1894.	1894.	1896.	1896.	1897.							
						Bowditch library.	Parker library.	Prince library.	Todd library.	Tieknor library.	Barton library.	Thayer library.	Hunt library.	Franklin library.	Gilbert library.	Patent library.	John A. Lewis library.	Military library.	John Adams library.	Allen A. Brown library.	Chamberlain library.	Galatea library.	Codman library.	Artz library.	Newspaper room.	Browning collection.	Statistical department.		Duplicate Room, unclassified.	Deposit collection.	
I.	Cyclopædias, etc.	8			1,801	249	322	6			21	15																			2,414
II.	Bibliography and literary history	554	5	2	13,121	35	615	5		278	690	33		10		8						12	1	1			1				14,810
III.	General history, biography and geography	487	7	8	14,297	17	647	43		54	135	424		1		2						105		2					1		15,727
IV.	American history, biography and geography	2,534	47	148	67,740	107	1,092	833		363	812	385	669	475	75	881	679	668				246		603	11		36				75,675
V.	English history, biography and geography	1,334	29	11	45,784	77	858	114		21	3,204	2,460		18	270	4,746						197	31	5		329	1				58,115
VI.	French history, biography and geography	721	37	8	23,963	60	522	7		58	2,474	670		8	4	425						104	1								28,296
VII.	Italian history, biography and geography	198	6	5	11,147	11	326	2		31	337	184			1							9		4							12,052
VIII.	German history, biography and geography	647	27	4	17,333	9	1,423	8		26	254	191		1	2	469						45		1			1				19,763
IX.	Greek, Latin and philology	304	22	3	9,973	9	1,181	197		132	617	23		3	1	1						8		1							12,146
X.	Spanish and Portuguese history, etc.	135	1	7	3,087	22	95			4,207	200	64			1	1															7,677
XI.	Oriental history, etc.	761	14		14,510	2	329	1		4	225	61				28						16					2				15,178
XIIa.	Periodicals	788	26	57	23,035	1,387	733	5		250	471	53		1	14							15		3	4,548						30,515
XIIb.	Transactions	128			7,151	58																									7,209
XIII.	Theology, ecclesiastical history, etc.	862	5	6	33,851	147	3,522	683		381	245	248		12			1					1		1							39,092
XIV.	Metaphysics and social science	1,200	36	4	20,932	6	1,360	52		121	130	66		29	2							321		2			5				23,026
XV.	Political economy	504	3	165	7,217	65	98			24	17	2															243				7,666
XVI.	Jurisprudence	232	1	7	8,080	3	307	14		63	28	2				101			2,819			36					6				11,459
XVII.	Medical science	754	8	9	21,433	3	75	23		5	27	5		4								39					16				21,630
XVIII.	Natural history and science	1,017	8	3	15,334	15	170	1		32	89	31											103								16,275
XIX.	Mathematics and physical science	1,108	30	34	20,125	4,039	136	25		63	48	2		19	1												20				24,478
XX.	Industrial arts, etc.	540	25	12	13,373	9	13			36	16	59		5	1	4												12			14,337
XXI.	Fine arts	1,648	33	6	16,883		30	1	129	14	43	400								7,874		30	351	1							25,666
XXII.	Bound volumes of miscellaneous pamphlets					13		1			84	10			50																158
XXIII.	Bound volumes of manuscripts	20			101	6		25		46	93			12			1				f 150										434
XXIV.	Shakespeare							1			3,231																				3,232
XXV.	Books for the blind				559																										559
XXVI.	Stack 4 and Y	2,704	1,646	672	45,263																										45,263
XXVII.	Duplicate room																											15,135			* 15,135
XXVIII.	Deposit collection																												† 2,845		2,845
Totals		19,183	2,016	1,171	457,093	6,349	13,854	2,047	129	6,209	13,491	5,388	669	598	422	6,666	681	668	2,819	7,874	f 150	1,184	696	624	4,559	329	343	15,135	† 2,845		550,822

EXPLANATION. — Class III. includes general history, etc., when embracing several countries, and collected works of historians.
 Class IV. includes the collected works of American writers, and what of American literature is sometimes termed "polygraphy."
 Classes V., VI., VII., and VIII. have the same scope for the respective countries that Class IV. has for America.
 Class VIII. includes also Belgium, the Netherlands, Switzerland, and the Scandinavian nations.
 Class XIV. includes political science and ethics, education, etc.
 Class XIX. includes mechanics, military and naval arts, agriculture, domestic arts, etc.

Class XXIV. does not include the Shakespeare collection of the general library.
 Class XXVI. contains the former "Lower Hall" collection, which has a different classification. It includes 28,697 volumes of fiction.
 * 1,701 taken (by exchange, etc.) from, and 3,764 added to last year's total of 13,072.
 † The Deposit collection is in 9 classes — 1, Children's books; 2, — ; 3, Fiction; 4, Literature; 5, Biography; 6, History; 7, Travel; 8, Science; 9, Misc.
 ‡ Framed.
 NOTE. — The dates given in the special libraries column show the year when these collections were acquired by the Library.

APPENDIX V.

CLASSIFICATION.

BRANCH LIBRARIES.

[This table is omitted from this year's report, owing to the reclassification now in process and uncompleted in the Branches.]

APPENDIX VI.

REGISTRATION DEPARTMENT.

Statistical Report, February 1, 1898, to January 31, 1899.

FORMER REGISTRATIONS.

	Date.	No. of Names.
First	1854-1858	17,066
Second	1859-1867	52,829
Third	1868-April 30, 1886	227,581
Fourth	May 1, 1886-March 31, 1894	124,396
Fifth	April 1, 1894-December 31, 1894	25,443
Sixth	January 1, 1895-January 31, 1899	97,509

Registrations, including old and new names, lost and filled cards replaced, expired cards renewed during each year, for the five years prior to 1895:

1890	.	.	.	.	14,175
1891	.	.	.	.	11,502
1892	.	.	.	.	11,707
1893	.	.	.	.	11,029
1894	.	.	.	.	29,971

Average, 15,677.

LIVE CARDS OUTSTANDING.

DATE.	Number.	Gain.
February 1, 1899	72,005	
February 1, 1898	64,973	7,032
February 1, 1898	64,973	
February 1, 1897	45,606	19,367
February 1, 1897	45,606	
February 1, 1896	34,842	10,764
February 1, 1896	34,842	
January 1, 1895	29,971	4,871
Total gain		42,034

DIVISIONS.	Live Cards Feb. 1, 1898.	CARDS ISSUED FEBRUARY 1, 1898—JANUARY 31, 1899.												Total Number Cards Out.	Expired (Issued un- der two year limit).	Live Cards Jan. 31, 1899.	Gain for Year. (* Loss.)	Lost Cards replaced.		Filled Cards re- placed, etc.
		RE-REGISTRATIONS.				NEW REGISTRATIONS.				RENEWALS.										
		Males.		Females.		Males.		Females.		Males.		Females.								
		Over 21.	Under 21.	Over 21.	Under 21.	Over 21.	Under 21.	Over 21.	Under 21.	Over 21.	Under 21.	Over 21.	Under 21.					Paid for.	After delay.	
Central Library	28,894	386	15	421	6	2,105	527	2,246	413	2,292	584	2,839	403	41,131	9,964	31,167	2,273	382	602	9,818
Brighton Branch	1,290	12		19	2	25	96	45	86	47	102	102	100	1,892	466	1,426	170	11	111	428
Charlestown Branch	2,828	10	2	25	3	127	249	143	254	122	108	280	140	4,291	1,139	3,152	324	17	63	1,636
Dorchester Branch	2,087	18	6	35	2	49	140	73	139	124	168	326	171	4,238	1,431	2,807	* 180	8	157	715
East Boston Branch	3,124	31	2	44	4	92	322	128	301	139	203	285	212	4,887	1,077	3,810	686	23	233	920
Jamaica Plain Branch	3,892	19	3	41	3	55	132	109	147	115	195	433	220	5,274	2,018	3,256	* 546	16	153	554
Roxbury Branch	4,373	11		21	1	90	369	192	312	256	236	512	288	6,861	1,858	5,003	430	22	291	1,108
South Boston Branch	4,189	29	3	49	3	117	334	147	269	174	294	367	272	6,247	1,643	4,604	415	27	365	3,465
South End Branch	2,210	2	1	13	1	87	86	246	87	145	64	385	57	3,384	818	2,566	356	19	122	1,942
West End Branch	4,647	7	1	24		306	302	228	486	131	149	146	127	6,554	2,573	3,981	* 606	9	386	1,539
West Roxbury Branch	188	8		15	5	20	45	60	21	80	36	147	56	679		679	493	1	58	287
Station A	139	2		4	2	9	32	29	25	6	12	15	4	279	53	226	87	2	24	67
" B	316	16	2	18	3	25	83	53	64	32	20	58	30	720	232	488	172	2	70	188
" D	239		1	2		15	17	31	16	20	3	39	14	384	16	368	142		10	59
" E	115	1		2		22	29	40	48	8	6	18	10	269	57	242	127		13	62
" F	356					35	33	68	50	27	12	49	17	647	157	490	134		54	141
" G	548	2	2	8	2	60	76	59	88	18	34	34	48	949	256	693	175	4	89	175
" H	153	2	1	3	1	34	32	91	54	15	14	26	14	460	87	373	200		40	117
" J	377			5		27	39	73	34	16	21	27	14	633	219	414	37	1	42	184
" K	138			2	1	26	24	42	16	6	2	9	3	269	24	245	107	2	33	54
" L	169			1		12	20	10	31	4	22	10	22	292	17	275	115		30	87
" M	284	2		2		34	47	46	55	8	5	10	11	504	145	359	75		42	127
" N	482	2		1		43	43	91	71	16	28	33	31	841	288	553	71	3	92	237
" P	967	5	5	2		206	193	77	124	43	62	20	36	1,740	420	1,320	353	4	205	572
" Q	493	2		3		54	30	131	45	33	26	92	36	635	296	640	157	2	74	292
" R	568	2	5	10	1	51	57	98	58	33	46	116	60	1,105	243	862	294		137	351
" S	686			1	1	57	157	58	125	7	29	22	32	1,172	8	1,164	481	2	178	311
" T	292	4		3		65	89	100	86	15	23	24	5	706		706	414	2	86	157
" U						17	40	50	24	3		1	1	136		136	136			4
Totals	61,973	573	49	774	41	3,865	3,643	4,764	3,529	3,935	2,504	6,425	2,434	97,509	25,504	72,005	7,032	559	3,759	25,597

Number of persons to whom cards were given since January 1, 1895, who have allowed privilege to lapse, 482. Number of calls made by messenger at Central: verifying addresses, 5,591; for over-detained books (9 months), 532; total, 6,123.

CLASSIFICATION OF HOLDERS OF "LIVE CARDS"

JANUARY 31, 1899.

BY SEX AND OCCUPATION.

CLASSES.	Permanent residents.	¹ Non-residents.	Special cards.
MALES.			
<i>Over 21 years of age.</i>			
Professional classes	2,916	102	142
Teachers	497	121	15
Students	1,242	1,114	—
Business men	8,361	89	11
Unemployed	1,932	182	6
Laborers	702	3	—
<i>Under 21 years of age.</i>			
Clerks	1,313	23	—
Office and errand boys	689	2	—
Unemployed	421	7	—
Pupils of Latin and High schools	917	13	—
Pupils of Grammar schools	9,061	4	—
Pupils of Grammar schools under 12 years	287	—	—
Other students	468	69	—
FEMALES.			
<i>Over 21 years of age.</i>			
Professional classes	268	45	131
Teachers	1,704	179	23
Students	718	1,296	—
Business women	4,562	72	—
Married	9,781	37	—
Single, unemployed	8,207	570	4
<i>Under 21 years of age.</i>			
Clerks	1,537	89	—
Errand girls	453	1	—
Unemployed	1,268	39	—
Pupils of Latin and High schools	1,321	19	—
Pupils of Grammar schools	8,406	7	—
Pupils of Grammar schools under 12 years	342	—	—
Other students	370	47	—
Totals	67,543	4,130	332

¹ Including persons temporarily sojourning in Boston.

N.B. — Of the 1,818 teachers' cards issued prior to February 1, 1899, 816 are live cards; of these, 657 are held by permanent residents, in addition to their ordinary cards (not included in permanent residents' column above), and 159 are held by non-residents (which are included in non-residents' column above).

BY WARDS.

Ward No.	No. of card-holders	Population census of '95.	Percentage of card-holders.	Ward No.	No. of card-holders	Population census of '95.	Percentage of card-holders.
1...	1,748	21,007	.0832	14...	2,014	19,186	.1049
2...	1,136	21,588	.0526	15...	1,498	18,623	.0804
3...	1,256	13,943	.0900	16...	1,807	16,320	.1107
4...	859	13,375	.0642	17...	1,758	21,114	.0832
5...	1,158	12,986	.0891	18...	2,293	21,679	.1057
6...	1,307	27,860	.0469	19...	2,388	22,372	.1067
7...	1,895	16,973	.1116	20...	4,394	21,528	.2041
8...	4,809	23,130	.2079	21...	4,618	19,274	.2396
9...	2,872	23,174	.1239	22...	3,189	22,289	.1430
10...	9,079	22,554	.4025	23...	2,909	18,283	.1591
11...	4,839	19,930	.2420	24...	3,912	18,240	.2144
12...	5,395	21,591	.2498	25...	3,108	15,001	.2071
13...	1,764	24,900	.0708	Total	72,005	496,920	.1449

PUBLIC SCHOOLS, TEACHERS AND PUPILS.

JUNE 30, 1898.

GENERAL SCHOOLS.	Number of schools.	NUMBER OF REGULAR TEACHERS.			Average, number of pupils belonging.
		Men.	Women.	Total.	
Normal.....	1	2	9	11	265
Latin and High.....	11	70	105	175	4,599
Grammar.....	57	121	687	808	36,547
Primary.....	556	.....	556	556	29,379
Kindergartens.....	69	.....	.....	.....	3,988
Totals.....	694	193	1,493	1,686	74,778
SPECIAL SCHOOLS.					
Horace Mann.....	1	.....	.....	13	113
Spectacle Island.....	1	.....	.....	1	21
Evening High.....	1	.....	.....	.....	.....
Central.....	.....	.....	.....	25	1,775
Charlestown Branch.....	.....	.....	.....	7	212
East Boston Branch.....	.....	.....	.....	6	152
South Boston Branch.....	.....	.....	.....	6	187
Totals.....	3	.....	.....	58	2,460
Special teachers (not included above), .....	.....	20	88	108	.....
EVENING SCHOOLS.					
October, 1897-March, 1898.					
High and Elementary.....	12	.....	.....	139	3,148
Drawing.....	5	.....	.....	26	481
Totals.....	17	.....	.....	165	3,629
Grand total.....	714	213	1,581	2,017	80,867

APPENDIX VII.

CIRCULATION.

HOME USE ONLY.

	Total Circulation. Home Use.		From Central through Branches and Stations. Included in Central Library Circulation.		From Branches through Stations. Included in Branch Circulation.	
	1897-98.	1898-99.	1897-98.	1898-99.	1897-98.	1898-99.
	A.	B.	Included in "A."	Included in "B."	Included in "A."	Included in "B."
Central Library.....	388,489	422,849				
Brighton.....	31,382	36,217	618	909		
Charlestown.....	57,362	54,927	1,046	1,039		
Dorchester.....	58,105	55,768	818	729		
East Boston.....	62,993	60,435	1,077	1,693		
Jamaica Plain.....	57,176	52,225	1,543	1,436		
Roxbury.....	84,691	86,623	647	760		
South Boston.....	80,912	75,407	861	951		
South End.....	82,497	88,408	1,883	1,388		
West End.....	109,617	115,655	1,477	1,893		
West Roxbury.....	22,496	22,376	1,898	1,932		
Station A.....	4,283	5,205	1,398	2,008	³ 1,916	³ 854
B.....	13,870	13,501	4,082	6,409	² 2,632	² 1,022
D.....	3,193	2,702	3,559	3,649		
E.....		3,895	1,009	2,090	³ 4,255	³ 2,212
F.....	12,180	10,236	1,889	2,543		
G.....	9,186	9,041	2,883	4,567	⁴ 667	⁴ 880
H.....	7,929	7,410	1,878	3,667	³ 1,721	³ 2,063
J.....	10,447	8,886	2,746	3,979		
K.....	146	3,412	3,298	3,038		
L.....	3,808	3,914	1,460	1,862		
M.....	8,484	7,057	1,557	2,961		
N.....	9,770	9,946	3,853	5,215		
P.....	26,159	27,718	1,324	2,208		
Q.....	16,544	15,590	3,864	5,630		
R.....	14,090	11,873	3,533	7,743	⁵ 2,071	⁵ 1,974
S.....	17,004	14,653	1,383	2,901	.....	⁸ 4
T.....	2,600	9,875	1,013	6,174		
Carried forward.....	1,195,413	1,235,204	52,597	79,374	13,262	9,009

APPENDIX VII.—*Concluded.*

	Total Circulation. Home Use.		From Central through Branches and Stations. Included in Central Library Circulation.		From Branches through Stations. Included in Branch Circulation.	
	1897-98.	1898-99.	1897-98.	1898-99.	1897-98.	1898-99.
<i>Brought forward</i>	1,195,413	1,235,204	52,597	79,374	13,262	9,009
Station U.....		1,300	.....	336		
Brighton High School....		1,108				
Charles Sumner School ..		277				
Cottage Place.....	1,325	1,281				
House of Reformation...	1,903	4,515				
Marcella-street Home	425	398				
North Bennet street.....	592	464				
Parental School.....		1,047				
Roxbury High School...		248				
Hancock School.....			3,937	6,831		
Engine-houses			15,275	16,300		
Total.....	1,199,658	1,245,842	61,809	92,841	13,262	9,009

¹ Number sent on deposit. Number used on premises not recorded.

² Included in Jamaica Plain Branch Circulation.

³ " " " " " " " " " " " "

⁴ " " " " " " " " " " " "

⁵ " " " " " " " " " " " "

	1897-98.	1898-99.	Gain.
Central Library.....	388,489	422,849	34,360
Branches.....	811,169	822,993	11,824
Total.....	1,199,658	1,245,842	46,184 = 3%

APPENDIX VIII.

TRUSTEES FOR FORTY-SEVEN YEARS.

The Hon. Edward Everett was President of the Board from 1852 to 1864; the late George Ticknor in 1865; William W. Greenough, Esq., from 1866 to April, 1888; from May 7, 1888, to May 12, 1888, Prof. Henry W. Haynes; Samuel A. B. Abbott, Esq., May 12, 1888, to April 30, 1895; Hon. F. O. Prince since October 8, 1895.

The Board for 1852 was a preliminary organization; that for 1853 made what is called the first annual report. At first it consisted of one alderman and one common councilman and five citizens at large till 1867, when a revised ordinance made it to consist of one alderman, two common councilmen and six citizens at large, two of whom retired, unless reëlected, each year, while the members from the City Council were elected yearly. In 1878 the organization of the Board was changed to include one alderman, one councilman and five citizens at large, as before 1867; and in 1885, by the provisions of the amended city charter, the representation of the city government upon the Board, by an alderman and a councilman, was abolished, leaving the Board as at present, consisting of five citizens at large appointed by the Mayor.

Citizens at large in SMALL CAPITALS.

ABBOTT, SAMUEL A. B., 1879-95.
 Allen, James B., 1852-53.
 APPLETON, THOMAS G., 1852-57.
 Barnes, Joseph H., 1871-72.
 BENTON, JOSIAH H., JR., 1894-98.
 BIGELOW, JOHN P., 1852-68.
 BOWDITCH, HENRY I., 1865-68.
 BOWDITCH, HENRY P., 1894-98.
 Bradlee, John T., 1869-70.
 Bradt, Herman D., 1872-3.
 Braman, Jarvis D., 1868-69.
 BRAMAN, JARVIS D., 1869-72.
 Brown, J. Coffin Jones, 1861-62.
 Burditt, Charles A., 1873-76.
 Carpenter, George O., 1870-71.
 CARR, SAMUEL, 1895-96.
 CHASE, GEORGE B., 1876-85.
 Clapp, William W., Jr., 1864-66.
 Clark, John M., 1855-56.
 Clark, John T., 1873-78.
 CLARKE, JAMES FREEMAN,
 1878-88.

Coe, Henry F., 1878.
 Crane, Samuel D., 1860-61.
 CURTIS, DANIEL S., 1873-75.
 Dennie, George, 1858-60.
 DE NORMANDIE, JAMES, 1895-98.
 Dickinson, M. F., Jr., 1871-72.
 Drake, Henry A., 1863-64.
 Erving, Edward S., 1852.
 EVERETT, EDWARD, 1852-64.
 Flynn, James J., 1883.
 Frost, Oliver, 1854-55; 1856-58.
 FROTHINGHAM, RICHARD, 1875-79.
 Gaffield, Thomas, 1867-68.
 GREEN, SAMUEL A., 1868-78.
 GREENOUGH, WILLIAM W., 1856-88.
 Guild, Curtis, 1876-77; 1878-79.
 Harris, William G., 1869-70.
 Haynes, Henry W., 1858-59.
 HAYNES, HENRY W., 1880-95.
 HILLARD, GEORGE S., 1872-75;
 1876-77.
 Howes, Osborne, Jr., 1877-78.

Ingalls, Melville E., 1870-71.
 Jackson, Patrick T., 1864-65.
 Jenkins, Edward J., 1885.
 Keith, James M., 1868-70.
 Kimball, David P., 1874-76.
 Lawrence, James, 1852.
 Lee, John H., 1884-85.
 Lewis, Weston, 1867-68.
 LEWIS, WESTON, 1868-79.
 LEWIS, WINSLOW, 1867.
 LINCOLN, SOLOMON, 1897-98.
 Little, Samuel, 1871-73.
 Messinger, George W., 1855.
 Morse, Godfrey, 1883-84.
 MORTON, ELLIS W., 1870-73.
 Munroe, Abel B., 1854.
 Newton, Jeremiah L., 1867-68.
 Niles, Stephen R., 1870-71.
 O'Brien, Hugh, 1879-82.
 Pease, Frederick, 1872-73.
 Perkins, William E., 1873-74.
 Perry, Lyman, 1852.
 PIERCE, PHINEAS, 1888-94.
 Plummer, Farnham, 1856-57.
 Pope, Benjamin, 1876-77.
 Pope, Richard, 1877-78.
 Pratt, Charles E., 1880-82.
 PRINCE, FREDERICK O., 1888-98.

PUTNAM, GEORGE, 1868-77.
 Reed, Samson, 1852-53.
 RICHARDS, WILLIAM R., 1889-95.
 Sanger, George P., 1860-61.
 Sears, Phillip H., 1859-60.
 Seaver, Benjamin, 1852.
 Shepard, Harvey N., 1878-79.
 SHURTLEFF, NATHANIEL B.,
 1852-68.
 Stebbins, Solomon B., 1882-83.
 Story, Joseph, 1855-56; 1865-67.
 THOMAS, BENJAMIN F., 1877-78.
 TICKNOR, GEORGE, 1852-66.
 Tyler, John S., 1863-64; 1866-67.
 WALKER, FRANCIS A., 1896.
 Warren, George W., 1852-54.
 Washburn, Frederick L., 1857-58.
 WHIPPLE, EDWIN P., 1868-70.
 Whitmore, William H., 1882-83.
 WHITMORE, WILLIAM H., 1885-88.
 Whitney, Charles V., 1883-85.
 Whitney, Daniel H., 1862-63.
 Wilson, Elisha T., 1861-63.
 Wilson, George, 1852.
 WINSOR, JUSTIN, 1867.
 Wolcott, Roger, 1879.
 Wright, Albert J., 1868-69.

LIBRARIANS.

1852 to date.

(From 1858 to 1877 the chief executive officer was entitled Superintendent.)

CAPEN, EDWARD, *Librarian*, May 13, 1852-December 16, 1874.
 JEWETT, CHARLES C., *Superintendent*, 1858-January 9, 1868.
 WINSOR, JUSTIN, *Superintendent*, February 25, 1868-September 30, 1877.
 GREEN, DR. SAMUEL A., *Trustee, Acting Librarian*, October 1, 1877-
 September 30, 1878.
 CHAMBERLAIN, MELLIN, *Librarian*, October 1, 1878-September 30, 1890.
 DWIGHT, THEODORE F., *Librarian*, April 13, 1892-April 30, 1894.
 PUTNAM, HERBERT, *Librarian*, February 11, 1895.

APPENDIX IX.

EXAMINING COMMITTEES FOR FORTY-SEVEN YEARS.

The following have served on the Examining Committees for the years given. The names in *italics* are those of Trustees who have acted as chairmen of the various committees. The thirty-fourth year was from May 1 to December 31, 1885, a period of eight months, for which no Examining Committee was appointed.

- Abbott, *Hon.* J. G., 1870.
Abbott, S. A. B., 1880, 1894.
 Adams, Brooks, 1894.
 Adams, Nehemiah, *D.D.*, 1860.
 Adams, Wm. T., 1875.
 Alger, *Rev.* Wm. R., 1870.
 Amory, *Miss* Anna S., 1890, 1891.
 Andrew, *Hon.* John F., 1888.
 Andrews, Augustus, 1892, 1893.
 Appleton, *Hon.* Nathan, 1854.
 Apthorp, Wm. F., 1883.
 Arnold, Howard P., 1881.
 Aspinwall, *Col.* Thomas, 1860.
 Attwood, G., 1877.
 Bailey, Edwin C., 1861.
 Ball, Joshua D., 1861.
 Bancroft, Robert H., 1894.
 Bangs, Edward, 1887.
 Barnard, James M., 1866.
 Barry, *Rev.* Richard J., 1895.
 Bartlett, Sidney, 1869.
 Bates, *Hon.* John L., 1896, 1897.
 Beebe, James M., 1858.
 Beecher, *Rev.* Edward, 1854.
 Bent, Samuel Arthur, 1890, 1891.
 Bigelow, Jacob, *M.D.*, 1857.
Bigelow, Hon. John P., 1856.
 Blagden, George W., *D.D.*, 1856.
 Blake, J. Bapst, *M.D.*, 1897, 1898.
 Blake, John G., *M.D.*, 1883, 1891.
 Blake, *Mrs.* Mary E., 1894.
 Bodfish, *Rev.* Joshua P., 1879, 1891.
 Bowditch, Henry I., *M.D.*, 1855.
Bowditch, Henry I., M.D., 1865.
 Bowditch, Henry P., *M.D.*, 1881.
 Bowditch, J. Ingersoll, *LL.D.*, 1855.
 Bowman, Alfonzo, 1867.
 Bowne, *Prof.* Borden P., 1896, 1897.
 Bradford, Charles F., 1868.
 Bragg, *Hon.* Henry W., 1898.
 Brewer, Thomas M., 1865.
 Brimmer, *Hon.* Martin, 1890, 1891.
 Brooks, *Rev.* Phillips, 1871.
 Brown, Allen A., 1894.
 Browne, Alex. Porter, 1891.
 Browne, Causten, 1876.
 Buckingham, C. E., *M.D.*, 1872.
 Burdett, Everett W., 1896, 1897.
 Burroughs, *Rev.* Henry, Jr., 1869.
 Carr, Samuel, 1894.
 Carruth, Herbert S., 1892.
 Chadwick, James R., *M.D.*, 1877.
 Chamberlain, *Hon.* Mellen, 1894.
 Chaney, *Rev.* George L., 1868.
 Chase, George B., 1876.
Chase, George B., 1877, 1885.
 Cheever, David W., *M.D.*, 1894.
 Cheever, *Miss* Helen, 1896, 1897.
 Cheney, *Mrs.* Ednah D., 1881.
Clapp, William W., Jr., 1864.
 Clarke, James Freeman, *D.D.*, 1877.
Clarke, James Freeman, D.D., 1882.
 Clement, Edward H., 1894, 1895.
 Coale, George O. G., 1892, 1893.
 Collar, William C., 1874.
 Collins, *Hon.* Patrick A., 1898.
 Connolly, *Rev.* Arthur T., 1898.
 Corbett, *Hon.* Joseph J., 1896, 1897.
 Cudworth, Warren H., *D.D.*, 1878.
 Curtis, Charles P., 1862.
 Curtis, Daniel S., 1872.
 Curtis, Thomas B., *M.D.*, 1874.
 Cushing, Thomas, 1885.
 Dalton, Charles H., 1884.
 Dana, Samuel T., 1857.
 Dean, Benjamin, 1873.
 Denny, Henry G., 1876.
 Derby, Hasket, *M.D.*, 1895, 1896.
 Dexter, *Rev.* Henry M., 1866.
 Dillingham, *Rev.* Pitt, 1886.
 Dix, James A., 1860.
 Doherty, Philip J., 1888.

- Donahoe, Patrick, 1869.
 Donald, *Rev. E. Winchester*, 1898.
 Durant, Henry F., 1863.
 Duryea, Joseph T., *D.D.*, 1880.
 Dwight, John S., 1868.
 Dwight, Thomas, *M.D.*, 1880.
 Eastburn, Manton, *D.D.*, 1863.
 Eaton, William S., 1887.
 Edes, Henry H., 1886.
 Eliot, Samuel, *LL.D.*, 1868.
 Ellis, Arthur B., 1888, 1889.
 Ellis, Calvin, *M.D.*, 1871.
 Ellis, George E., *D.D.*, 1881.
 Endicott, William, Jr., 1878.
 Ensworth, William H., *M.D.*, 1898.
 Ernst, Carl W., 1897, 1898.
 Evans, George W., 1887, 1888, 1889.
 Everett, Sidney, 1895.
 Farlow, John W., *M.D.*, 1892, 1893.
 Field, Miss Gretchen, 1898.
 Field, Walbridge A., 1866.
 Fields, James T., 1872.
 Fitz, Reginald H., 1879.
 Fitz, Walter Scott, 1894.
 Foote, *Rev. Henry W.*, 1864.
 Fowle, William F., 1864.
 Freeland, Charles W., 1867.
 Frost, Oliver, 1854.
Frothingham, Richard, 1876.
 Furness, Horace Howard, *LL.D.*, 1882.
 Gannett, Ezra S., *D.D.* 1855.
 Garland, George M., *M.D.*, 1895, 1896.
 Gay, George H., 1876.
 Gilchrist, Daniel S., 1872.
 Gordon, George A., *D.D.*, 1885.
 Gould, A. A., *M.D.*, 1864.
 Grant, Robert, 1884.
 Gray, John C., *LL.D.*, 1877.
Green, Samuel A., *M.D.*, 1868.
 Green, Samuel S., 1895.
Greenough, William W., 1858, 1874, 1883, 1886.
 Grinnell, Charles E., 1874.
 Hale, *Rev. Edward E.*, 1858.
 Hale, *Mrs. George S.*, 1887, 1888.
 Hale, Moses L., 1862.
 Hale, Philip, 1893.
 Haskins, *Rev. George F.*, 1865.
 Hassam, John T., 1885.
 Hayes, *Hon. F. B.*, 1874.
 Haynes, Henry W., 1879.
Haynes, Henry W., 1881, 1884.
 Hayward, George, *M.D.*, 1863.
 Heard, John, Jr., 1888, 1889, 1891.
 Heard, John T., 1853.
 Hellier, Charles E., 1895.
 Hemenway, Alfred, 1898.
 Herford, Brooke, *D.D.*, 1884.
 Herrick, Samuel E., *D.D.*, 1888, 1889.
Hersey, Miss Heloise E., 1895, 1896.
 Higginson, Thomas W., 1883.
 Hill, Clemont Hugh, 1880.
 Hillard, *Hon. George S.*, 1853.
Hillard, Hon. George S., 1873.
 Hills, Thomas, 1898.
 Hodges, Richard M., *M.D.*, 1870.
 Holmes, Edward J., 1881, 1884.
 Holmes, Oliver W., *M.D.*, 1858.
 Holmes, Oliver W., Jr., *LL.D.*, 1882.
 Homans, Charles D., *M.D.*, 1867.
 Homans, *Mrs. Charles D.*, 1885, 1886, 1887.
 Homer, George, 1870.
 Homer, Peter T., 1857.
 Hubbard, James M., 1891.
 Hubbard, William J., 1858.
 Hudson, John E., 1895, 1896.
 Hunnewell, James F., 1880, 1893, 1894.
 Hutchins, Miss Emma, 1895, 1896.
 Hyde, George B., 1879.
 Irwin, Miss Agnes, 1894.
 Jeffries, B. Joy, *M.D.*, 1869.
 Jeffries, William A., 1893.
 Jenkins, Charles E., 1879.
 Jewell, *Hon. Harvey*, 1863.
 Jordan, Eben D., 1873.
 Kidder, Henry P., 1870.
Kimball, David P., 1874.
 Kimball, Henry H., 1865.
 Kirk, Edward N., *D.D.*, 1859.
 Lawrence, *Hon. Abbott*, 1853.
 Lawrence, Abbott, 1859.
 Lawrence, Miss Harriette S., 1890.
 Lawrence, James, 1855.
 Lee, Miss Alice, 1889, 1890, 1891.
 Lee, *Hon. John H.*, 1897, 1898.
Lewis, Weston, 1872, 1878.
 Lincoln, *Hon. F. W.*, 1856.
 Lincoln, Solomon, 1886.
 Little, James L., 1864.
 Lombard, *Prof. Josiah L.*, 1868.
 Loring, *Hon. Charles G.*, 1855.
 Lothrop, Loring, 1866.
 Lowell, A. Lawrence, 1897, 1898.
 Lowell, Augustus, 1883.
 Lowell, Edward J., 1885.
 Lunt, *Hon. George*, 1874.
 Lyman, George H., *M.D.*, 1885.
 McCleary, Samuel F., 1890.
 McNulty, *Rev. John J.*, 1896, 1897.
 Manning, *Rev. Jacob M.*, 1861.
 Mason, *Rev. Charles*, 1857.
 Mason, Miss Ellen F., 1898.
 Mason, Robert M., 1869.
 Maxwell, J. Audley, 1883.
 Metcalf, *Rev. Theodore A.*, 1888, 1889.
 Minns, Thomas, 1864.
 Minot, Francis, 1866.
 Morison, Miss Mary, 1892, 1893, 1895.

- Morrill, Charles J., 1885.
 Morse, John T., Jr., 1879.
 Morse, Robert M., Jr., 1878.
 Morton, *Hon. Ellis W.*, 1871.
 Mudge, *Hon. E. R.*, 1871.
 Neale, Rollin H., *D.D.*, 1853.
 Noble, John, 1882.
 Norcross, Otis, 1880.
 O'Brien, *Hon. Hugh*, 1879.
 O'Callaghan, John J., 1895.
 O'Reilly, John Boyle, 1878.
 Otis, G. A., 1860.
 Paddock, *Rt. Rev. Benj. H.*, 1876.
 Parker, Charles Henry, 1888, 1889.
 Parker, *Mrs. William L.*, 1897, 1898.
 Parkman, Henry, 1885.
 Parks, *Rev. Leighton*, 1882, 1896, 1897.
 Perkins, Charles C., 1871.
 Perry, Thomas S., 1879, 1882, 1883, 1884, 1885, 1890, 1891.
 Phillips, John C., 1882.
 Phillips, Jonathan, 1854.
 Pierce, *Hon. Henry L.*, 1891.
 Pingree, *Miss Lalia B.*, 1894.
 Prescott, William H., *LL.D.*, 1853.
 Prince, *Hon. F. O.*, 1888, 1889, 1890, 1891, 1892, 1893, 1895, 1896.
 Putnam, *George, D.D.*, 1870.
 Putnam, *Hon. John P.*, 1865.
 Putnam, William L., 1898.
 Randall, Charles M., *M.D.*, 1884.
 Rice, *Hon. Alexander H.*, 1860.
 Robbins, Elliott, *M.D.*, 1893.
 Roche, James Jeffrey, 1898.
 Rogers, *Prof. William B.*, 1861.
 Rollins, J. Wingate, 1888, 1889.
 Ropes, John C., 1872.
 Rotch, Benjamin S., 1863.
 Runkle, *Prof. J. D.*, 1882.
 Russell, Samuel H., 1880.
 Sampson, O. H., 1892, 1893.
 Sanger, *Hon. George P.*, 1860.
 Searle, Charles P., 1898.
 Seaver, Edwin P., 1881.
 Shepard, *Hon. Harvey N.*, 1888, 1889.
 Sherwin, Mrs. Thomas, 1893, 1894.
 Shurtleff, *Hon. Nathaniel B.*, 1857.
 Smith, Azariah, 1895, 1896.
 Smith, Charles C., 1873.
 Smith, *Mrs. Charles C.*, 1881, 1886.
 Smith, *Miss Minna*, 1892.
 Sowdon, A. J. C., 1892, 1893.
 Sprague, Charles J., 1859.
 Sprague, Homer B., 1882.
 Stedman, C. Ellery, *M.D.*, 1888.
 Stevens, Oliver, 1858.
 Stevenson, *Hon. J. Thomas*, 1856.
 Stockwell, S. N., 1861.
 Stone, *Col. Henry*, 1885, 1886, 1887.
 Story, Joseph, 1856.
 Sullivan, Richard, 1883, 1884.
 Teele, John O., 1886.
 Thaxter, Adam W., 1855.
 Thayer, George A., 1875.
 Thayer, *Rev. Thomas B.*, 1862.
 Thomas, B. F., *LL.D.*, 1875.
 Thomas, Seth J., 1856.
 Ticknor, *Miss Anna E.*, 1891.
 Ticknor, *George, LL.D.*, 1853, 1854, 1855, 1859, 1863, 1866.
 Tillinghast, Caleb B., 1895, 1896.
 Tobey, *Hon. Edward S.*, 1862.
 Todd, William C., 1894.
 Twombly, *Rev. A. S.*, 1883, 1884.
 Upham, J. B., *M.D.*, 1865.
 Vibbert, *Rev. Geo. H.*, 1873.
 Wales, George W., 1875.
 Walley, *Hon. Samuel H.*, 1862.
 Ward, *Rev. Julius H.*, 1882.
 Ware, Charles E., *M.D.*, 1875.
 Ware, Darwin E., 1881.
 Warner, Hermann J., 1867.
 Warren, *Hon. Charles H.*, 1859.
 Warren, J. Collins, *M.D.*, 1878.
 Waterston, *Rev. Robert C.*, 1867.
 Weissbein, Louis, 1893.
 Wells, *Mrs. Kate G.*, 1877.
 Wendell, *Prof. Barrett*, 1895, 1896.
 Wharton, William F., 1886.
 Whipple, *Edwin P.*, 1869.
 Whitmore, William H., 1887.
 Whitney, Daniel H., 1862.
 Whitney, Henry A., 1873.
 Wightman, *Hon. Joseph M.*, 1859.
 Williams, Harold, *M.D.*, 1888, 1889, 1890.
 Williamson, William C., 1881.
 Williamson, *Mrs. William C.*, 1897, 1898.
 Wilson, *Elisha T.*, *M.D.*, 1861.
 Winsor, *Justin, LL.D.*, 1867.
 Winthrop, *Hon. Robert C.*, 1854.
 Winthrop, Robert C., Jr., 1887.
 Wood, Frank, 1897, 1898.
 Woodbury, Charles Levi, 1871.
 Woolson, *Mrs. Abba Goold*, 1888, 1889.
 Wright, *Hon. Carroll D.*, 1884.

APPENDIX X.

SCHEDULE OF LIBRARY SERVICE.

Note.—This has been brought down to March 31, 1899. The order is (1) by rank in grades, and (2) alphabetical, within each grade.

SUMMARY.

Central Library	167.	Males	88	Females	79
Branches and Reading rooms	64	"	15	"	49
	231		103		128

Evening and Sunday service, Central Library, * 65
 Sunday service, Branches, 12.

Extra assistance is employed at the branches.

EXECUTIVE DEPARTMENT.

Name.	Entered.	Grade.
Putnam, Herbert	1895	Librarian.
Savage, Philip H. . . .	1896	Librarian's Sec
† Mooney, George V. . . .	1889	B. Special.
Deery, D. Jean.	1891	B. "
Learned, Lucie A.	1891	B. "
Cellarius, Theodore W. . . .	1892	D. "
Hutchins, Fernald	1896	D. "
McFarland, Peter V.	1896	D.
Nichols, Adelaide A.	1868	Auditor.
** Bicknell, Margaret M. . . .	1896	C. Special.

CATALOGUE DEPARTMENT.

Whitney, James L.	1869	Chief.
¶ Swift, Lindsay	1878	A. Special.
Chevalier, Samuel A.	1894	A. "
Hunt, Edward B.	1883	A. "
Murdoch, John	1896	A. "
Burnell, Carrie	1881	A.
Rollins, Mary H.	1886	A.
Seaver, Mrs. Lillian F.	1888	A.
Rice, Edwin F.	1885	B. Special.
Tenney, Mary A.	1897	B. "
Bartlett, Mary R.	1897	B.
Cutler, Dora L.	1887	B.
Gould, Ida W.	1884	B.

* Serving from three to seven evenings a week each. The total number of positions is 35, evenings; 40, Sundays.

** Auditor's Assistant. † Custodian of Stock Room. ¶ Editor Library Publications.

Name.	Entered.	Grade.
Hemmings, Anita F. . . .	1897	B.
Leavitt, Luella K. . . .	1895	B.
Brennan, T. Frank	1890	C. Special.
Dolan, Charles W. . . .	1894	D.
Shaughnessy, John F. . . .	1898	E.

ORDERING DEPARTMENT.

Macurdy, Theodosia E. . . .	1889	Chief.
Coolidge, Marie	1893	B. Special.
Seemüller, Mary	1899	B. “
Frinsdorff, Emily O. . . .	1894	B. “
Goddard, Mrs. Frances H. . . .	1892	B.
McGrath, Mary A. . . .	1868	B.
McFarland, Thomas A. . . .	1891	C. Special.
Keleher, Alice A. . . .	1891	D. “
St. Louis, Robert E. . . .	1897	D. Runner.

SHELF DEPARTMENT.

Roffe, William G. T. . . .	1881	A. Div. 2.
Locke, John F. . . .	1894	B.
Richmond, Bertha P. . . .	1895	B.
Connor, George H. . . .	1891	C. Special.
Eberhart, John	1894	C. “
Reardon, John H. . . .	1896	C. “
Caiger, Eliza F. A. . . .	1895	D.
Lucid, John F. . . .	1893	D.
Shawno, Robert	1898	D.

BATES HALL.

Bierstadt, Oscar A. . . .	1899	Custodian.
† Blaisdell, Frank C. . . .	1876	A. Special.
Buckley, Pierce E. . . .	1891	B.
Doyle, Agnes C. . . .	1885	B.
Plunkett, Albert J. . . .	1895	D. Special.
Hannigan, Frank J. . . .	1898	D.
Hardy, Charles A. . . .	1896	D.

SPECIAL LIBRARIES.

Fleischner, Otto	1891	Custodian.
Hitchcock, Grace A. . . .	1895	B. Special.
Hall, Belle S. . . .	1895	B.
Patten, Mary L. . . .	1898	B.
Whitney, Margaret D. . . .	1898	B.
Ward, Joseph W. . . .	1891	C. Special.
Cassidy, Margaret L. . . .	1895	D. “
Kelly, Charlotte H. . . .	1895	D. “

† In charge of Patent and Newspaper Departments.

Name.	Entered.	Grade.
Smith, Arthur E. F. . .	1897	D.
McKiernan, John L. . .	1896	D. Runner.
Maiers, William C., Jr. . .	1897	D. “

DOCUMENTS DEPARTMENT.

Ford, Worthington C. . .	1898	Chief.
Lane, Lucius P.	1898	B.

PERIODICAL-ROOM.

Wendté, Frederika	1895	C.
Ford, Mary E. A.	1895	D.
Maguinness, James	1897	D. Runner.

NEWSPAPER-ROOM.

Serex, Frederic	1895	B.
Keenan, Matthew T. . . .	1896	D. Special.

ISSUE DEPARTMENT.

McGuffey, Margaret D. . . .	1895	Chief.
* Sheffield, Mrs. Gertrude P. . .	1896	B. Special.
Forrest, Gertrude E.	1895	B. “
Barry, Edward F.	1890	C. “
Cufflin, M. Florence	1892	C. “
McCarthy, Michael, Jr. . . .	1892	C. “
Sheridan, Mary C.	1881	C. “
Desmond, Louise L.	1895	C.
Richards, Florence F. . . .	1875	C.
Shumway, Marion H.	1895	C.
Bertram, Lucy I.	1895	D. Special.
Cunniff, Nellie L.	1895	D. “
Dowling, S. Jennie	1895	D. “
McCarthy, Marion A.	1895	D. “
Murphy, Annie G.	1888	D. “
Reynolds, Mary A.	1894	D. “
Roett, Louis W.	1895	D. “
Wiechmann, Catherine A. . . .	1895	D. “
Connolly, Nelly L.	1895	D.
Daly, Margaret C.	1895	D.
Ethier, Lillian E.	1895	D.
Gorman, John E.	1895	D.
Kiernan, Letitia M.	1895	D.
Lucid, Joseph A.	1895	D.
Mayer, Harry F.	1897	D.
Olson, Alphild	1895	D.
Olson, Bertha A.	1895	D.
Williams, Grace	1895	D.

* In charge of Juvenile Department.

Name.	Entered.	Grade.
Zaugg, Joanna . . .	1895	D.
Zaugg, Otto E. . . .	1895	D.
Barry, Margaret M. . .	1897	D. Runner.
Bryce, Jean M.	1898	D. “
Cole, Grace E.	1897	D. “
Hagerty, Mary E. . . .	1897	D. “
Hersey, Edna M.	1898	D. “
McKenzie, Kenneth . . .	1897	D. “
McSweeney, M. Agnes . .	1897	D. “
Schulz, Henry A. C. . . .	1898	D. “
Shaughnessy, Mary A. . .	1897	D. “
Stetson, Nina M.	1896	D. “
Gorman, Annie L.	1899	E.
Schnabel, Paul J.	1898	E.

ISSUE DEPARTMENT, BRANCH DIVISION.

Ward, Langdon L. . . .	1896	Supervisor of Branches and Delivery Stations.
Kueffner, Cecilia W. . . .	1898	B.
Painter, Florence McM. . .	1897	B.
Heimann, Otto A.	1890	C. Special.
Morse, Maud M.	1877	C. “
Bollog, Emma	1898	C.
Maier, Joseph A.	1892	D. Special.
Brown, Richard	1898	D.
Conroy, Michael J.	1897	D. Runner.

REGISTRATION DEPARTMENT.

Keenan, John J.	1885	B. Special.
Murray, Ella K.	1886	C.
Shelton, Richard B. . . .	1895	D. Special.
Fillebrown, Emily F. . . .	1895	D.

PRINTING DEPARTMENT.

	Entered.	Position.
Lee, Francis W.	1894	Chief.
Geyer, Willfried H. . . .	1896	Pressman.
Greeley, Carrie P.	1896	Compositor.
Land, Annie F.	1896	“
Ives, Birdsey F.	1896	Feeder.

BINDERY.

Ryder, Frank	1883	Foreman.
Collins, Dennis J.	1887	Finisher.
Dougan, William J.	1898	Forwarder.
Fuerst, Alexander	1896	“
Hoeffner, George	1891	“
Ivory, John W.	1893	“
Löfström, Konrad A. . . .	1892	“

Name.	Entered.	Position.
Murphy, John F. . . .	1883	Forwarder.
Sullivan, J. Henry . . .	1898	"
Hemstedt, William P. . .	1883	Pressman.
Bowen, Mrs. Sarah E. . .	1876	Sewer.
Doiron, Joanna	1896	"
Healey, Margaret	1899	"
Kiley, Margaret J. . . .	1889	"
Moriarty, Mary G. . . .	1875	"
Nolen, Sarah	1891	"
Potts, Ellen F.	1892	"
Soule, Ellen E.	1891	"

ENGINEER AND JANITOR DEPARTMENT.

Niederauer, Henry . . .	1894	Chief Engineer.
McCready, Alexander . .	1895	Engineer.
Malone, John P.	1895	"
O'Neill, Harry	1896	"
Zittel, George, Jr. . . .	1891	"
Herland, Nils J.	1895	Fireman.
Moran, John A.	1894	"
Karlson, Charles W. . . .	1896	Book Motors.
* Williams, John L. . . .	1886	Janitor.
Lawrence, John A. . . .	1898	"
Frye, Henry	1898	"
McCarty, Dennis	1888	Watchman.
McGee, Alexander D. . .	1896	Painter.
Wall, Frank A.	1897	Carpenter.
Hanna, William T. . . .	1895	Marble polisher.
Chavies, Samuel H. . . .	1899	Elevator and Coat room attendants.
Cole, William E.	1898	
Thomas, Arthur C. . . .	1898	

EAST BOSTON BRANCH.

Name.	Entered.	Grade.
Walkley, Ellen O. . . .	1897	B. Special.
Brackett, Marian W. . .	1897	C.
Wing, Alice M.	1873	C.
Bickford, Lillian A. . .	1891	D.
Hosea, George H.	1873	Janitor.
Taylor, Charles F. . . .	1897	"

SOUTH BOSTON BRANCH.

Bullard, N. Josephine . .	1883	B. Special.
Eaton, Ellen A.	1873	C.
Sampson, Idalene L. . . .	1878	C.
McQuarrie, Annie C. . .	1894	D.
Oreutt, Alice B.	1887	D.
Sumner, Alice F.	1897	D.
Baker, Joseph	1872	Janitor.

* Charge of book motors, evenings.

ROXBURY BRANCH.

Name.	Entered.	Grade.
Bell, Helen M.	1878	B. Special.
Berry, Martha L. C.	1883	C.
Puffer, Dorothy	1878	C.
Griggs, Sarah W.	1886	D.
Lynch, Gertrude A.	1894	D.
Monahan, William	1883	Janitor.

CHARLESTOWN BRANCH.

Cartée, Elizabeth F.	1886	B. Special.
Livermore, Mrs. Susan E.	1885	C.
Reagen, Elizabeth R.	1895	C.
O'Neill, Margaret M.	1892	D.
Rogan, Katharine S.	1896	D.
Smith, Thomas E.	1874	Janitor.

BRIGHTON BRANCH.

Hobart, Martha N.	1896	B. Special.
Conley, Ellen F.	1891	C.
Dale, M. Florence	1895	D.
Warren, Edward A.	1898	Janitor.

DORCHESTER BRANCH.

Reed, Mrs. Elizabeth T.	1873	B. Special.
Griffith, Mary E.	1886	C.
Donovan, Mary G.	1891	D.
Kellogg, Grace E.	1898	D.
Meffen, Margaret	1892	D.
Davenport, Edward	1875	Janitor.

SOUTH END BRANCH.

Sheridan, Margaret A.	1875	B. Special.
McKirdy, Alice E.	1896	C.
Lynch, Emma F.	1885	D.
Meehan, Margaret F.	1893	D.
Mulloney, William J.	1892	D.

JAMAICA PLAIN BRANCH.

Swain, Mary P.	1877	B. Special.
Riley, Nellie F.	1878	C.
Albert, Katie F.	1892	D.
Kenney, Thomas W.	1897	Janitor.

WEST END BRANCH.

Davis, Mrs. Eliza R.	1877	B. Special.
Barton, Margaret S.	1885	C.
Forbes, George W.	1896	C.
Mooney, Katharine G.	1885	C.

Name.	Entered.	Grade.
Kiley, Mary E.	1896	D.
Riley, Mary E.	1891	D.
Kelly, William D.	1898	D. Runner.
Porter, Frank C.	1896	D. “
Sullivan, Daniel J.	1898	Janitor.

WEST ROXBURY BRANCH.

Morse, Carrie L.	1890	D. Special.
Hendersón, Irene E.	1898	E.
Woods, Eugene B.	1898	Janitor.

DELIVERY STATIONS.

Station.	Custodian.	Grade.
A. Lower Mills Reading-room.	Hill, M. Addie.	D. Special.
B. Roslindale Delivery Station.	Davis, William W.	
C. West Roxbury Branch.	See above.	
D. Mattapan Reading-room.	Capewell, Mrs. Emma G.,	D. Special.
E. Neponset Delivery Station.	Barnes, Charles D.	
F. Mt. Bowdoin Reading-room. ...	Fairbrother, Mrs. Eliz. G.,	D. Special.
G. Allston Delivery Station.	Howe, W. A. & Co.	
H. Ashmont Delivery Station.	Weymouth, Clara E.	
J. Dorchester Sta. Delivery Sta.	Sexton, Mrs. Annie M.	
K. Bird-st. Delivery Station.	Morris, Antoinette.	
L. No. Brighton Reading-room. ...	Muldoon, Katherine F.	D. Special.
M. Crescent-ave. Delivery Station.	Johnson, Charles E., & Co.	
N. Blue Hill-ave. Delivery Station.	Riker, Mrs. S. A.	
P. B'way Extension Delivery Sta. .	{ Stewart, Cora L.	D. Special.
	{ Myers, Benjamin, Assistant.	D.
Q. Upham's Corner Delivery Sta. .	Bird, Mrs. Thomas H.	
R. Warren-st. Delivery Station. ...	Woodward, C. E. & Co.	
S. Roxbury-crossing Delivery Sta. .	Yeaton, E. Christine.	D. Special.
T. Boylston Delivery Station.	Locke, Joseph B.	
U. Ward 9 Delivery Station.	McGrath, Amelia F.	C.

EVENING AND SUNDAY SERVICE.

Central Library.

6 P.M. TO 10 P.M. WINTER SCHEDULE.

SUNDAYS, 2 TO 10 P.M.

BATES HALL.

Officers in Charge.	Hours.
Chevalier, Samuel A. See Issue Department	4
Fleischner, Otto	8
Hunt, Edward B.	10
Swift, Lindsay	10
Assistants.	
Roffe, William G. T.	9½
Walsh, William A. See Fine Arts.	15½
Central Desk.	
Buckley, Pierce E. See Issue Department	8
Reardon, John H. See Deliverers of Books	4
Williams, David L.	20

	Hours.
Care of Reference Books.	
Heimann, Albert E.	24
Plunkett, Albert J. See Newspaper room . . .	8
Collectors of Slips.	
McKenzie, Kenneth	9
Pearson, John A. See Runners	7
Pitts, James A. See Fine Arts Extra Assistants .	9
Runners.	
Beckford, Fred A. See Cars, Book-case and Runners,	9
Campbell, Charles D. See Issue Dep't Runners . .	3
Sullivan, Frank T.	10
Zaugg, Otto E. See Issue Department Runners .	3

ISSUE DEPARTMENT.

Officers in Charge.	
Blaisdell, Frank C.	20
Buckley, Pierce E. See Central Desk	4
Chevalier, Samuel A. See Bates Hall	8
Receiver of Books.	
Blaisdell, Fred W.	25
Deliverers of Books.	
Clarke, William S. See Indicator. Runners . . .	12
Reardon, John H. See Central Desk	13
Care of Indicator.	
Clarke, William S. See Deliverers of Books. Runners,	13
Hannigan, Walter T. See Care of Tubes	12
Assistants at Indicator.	
Currier, Ulysses S. G.	7
Gorman, John E. See Tubes and Juvenile Library .	3
Tenny, Robert M. See Cars and Fine Arts	12
Care of Slips.	
Heimann, Otto A.	7
Hughes, John A.	18
Desk Attendant.	
Ford, Daniel J. See Runners	25
Care of Tubes.	
Gorman, John E. See Assistants at Indicator and	
Juvenile Library	3
Hannigan, Frank J.	9
Hannigan, Walter T. See Indicator	13
Care of Carriers.	
Beckford, Fred A. See B. H. Runners, Book-case and	
Issue Department Runners	6½
Lucid, John F.	9
Roett, Louis W. See Book-case	3½
Tenny, Robert M. See Indicator Assistants and	
Fine Arts	6

Hours.

Book-case Attendants.

Beckford, Fred A. See B. H. Runners, Carriers . . .	6
Glover, John H. See Runners	6
Roett, Louis W. See Cars	6
St. Louis, Robert E.	7

Runners.

Beckford, Fred A. See B. H. Runners, Carriers and Book-case	3½
Benson, Edwin F. A.	10
Campbell, Charles D. See B. H. Runners . . .	19
Clarke, William S. See Indicator. Deliverers of Books,	7
Conners, Timothy J.	25
Conroy, Michael J.	6½
Doyle, Charles A.	25
Ford, Daniel J. See Desk Attendant	7
Glover, John H. See Book-case Attendants . . .	4
Hughes, Thomas F.	9
Lucid, Joseph A.	7
McFarland, Peter V.	9
Mackinnon, Bergan A. See Juvenile Library . . .	6
Maier, Joseph A.	9
Maiers, William C., Jr.	9
Mayer, Harry F.	9½
Martin, D. Clifford. See Barton Library Assistants .	18
Pearson, John A. See Collectors of Slips . . .	3
Trueman, Nelson G.	22
Weller, Waldo W. See Fine Arts Extra Assistants,	9
Zaugg, Otto E. See B. H. Runners	6½

BARTON LIBRARY.

In Charge.

Lee, Francis W.	16
Tiffany, Edward	16

Assistants.

McKiernan, John L.	12
Martin, D. Clifford. See Runners	8
Smith, Arthur E. F. See Fine Arts Assistants . . .	12

FINE ARTS DEPARTMENT.

In Charge.

Bourne, Frank A.	20
Walsh, William A. See Bates Hall Assistants . . .	12

Assistants.

Smith, Arthur E. F. See Barton Library Assistants,	12½
Ward, Joseph W.	12½

Extra Assistants.

Pitts, James A. See Collectors of Slips	8
Shawno, Robert	12
Weller, Waldo W. See Runners	12

Hours.

PERIODICAL ROOM.

Connors, John F.	32
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REGISTRATION DESK.

Fallon, William E.	21½
Keenan, John J.	3½

JUVENILE LIBRARY.

Attendants.

Hall, Belle S.	6
Kelly, Charlotte H.	9½
Owen, Marion L.	9½

Extra Attendants.

Gorman, John E.	See Assistants at Indicator and Tubes	4
Mackinnon, Bergan A.	See Runners	4
Russell, J. Edward		28

PATENT ROOM.

Attendants.

Keenan, Matthew T.	16
Serex, Frederic	16

NEWSPAPER ROOM.

Attendants.

Brennan, Thomas F.	12
Connor, George H.	16
Plunkett, Albert J.	See Care of Reference Books 4

REPLACEMENT OF BOOKS.

Barry, Edward F.	12½
McCarthy, Michael, Jr.	12½

SUNDAY SERVICE.

* *Branch Libraries.*

NOVEMBER 1 TO MAY 1.

* With the exception of the West End Branch, which is open Sundays throughout the year; the regular week-day attendants serve Sundays, their compensation being for seven days per week.

CHARLESTOWN BRANCH, 2 TO 10 P.M.

In Charge.

	Hours.
Day, John	8
Harrington, Walter	8

Janitor.

Smith, Thomas	8
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EAST BOSTON BRANCH, 2 TO 10 P.M.

Hours.

In Charge Issue Desk.

Bussey, George D. 7

In Charge Reading Room.

Hosea, George H. 8

Heat Janitor.

Taylor, Charles F. 8

SOUTH BOSTON BRANCH, 2 TO 10 P.M.

In Charge.

Orcutt, Alice B. 7

Janitors.

Baker, Joseph 8

Saunders, Thomas 8

STATION P, 2 TO 6 P.M., 7 TO 9 P.M.

In Charge.

Herr, Irving 6

Assistant.

Brown, Richard 2

STATION S, 2 TO 6 P.M., 7 TO 9 P.M.

In Charge.

Damon, Helen G. 6

APPENDIX XI.

SYSTEM OF SERVICE.

AS IN FORCE MARCH 31, 1899.

The system of graded service with provision for examinations as set forth in Article VI. of the By-laws quoted below was adopted by the Trustees in April, 1895. Employees then in the service were graded thereunder. The application of the system to such employees was, however, made with this proviso: that it should not of itself entitle any employee to an increase of salary nor subject him to a decrease. In some cases, therefore, the salaries of present employees do not yet accord precisely with the salaries of the grades under which they are classed. But increases of salary that may be recommended on the ground that the service rendered is entitled to higher pay will be made only in accordance with the system. And all promotions, as well as new appointments, will be made in accordance with the system.

EXTRACTS FROM BY-LAWS.

ARTICLE VI., SECTION 1. — *Examinations.* Semi-annually, or oftener if expedient, examinations shall be held under the direction of the Librarian, for admission, by promotion or otherwise, to all grades of employment in the Public Library, except the positions of Librarian, Assistant Librarian, Librarian's Secretary, Auditor, Chief Catalogner, Chief of Shelf Department, Custodian of Bates Hall, Chief of Ordering Department, Chief of Issue Department, Supervisor of Branches and Stations, Chief Engineer, Chief of Printing Department and Chief of Bindery.

From the list of those persons who have successfully passed the examinations of the grade in which they seek employment, appointments shall be made by the Trustees upon nomination by the Librarian in consultation with the head of the department in which the appointment is to be made.

ARTICLE V., SECTION 2. — *Vacations and other Absences.* All persons regularly employed in the Library, except persons employed in the Engineer's or Janitor's departments, or in the Bindery, shall be entitled to a vacation at the rate of twenty-four days for each year in the service, exclusive of legal holidays, and of the weekly half-holiday allowed by the city ordinance, to be arranged by the Librarian. No allowance shall be made for absence from duty except as above provided.

SECTION 3. The President or Librarian shall have power to suspend, with loss of pay, any person in the Library service until the first succeeding meeting of the corporation.

The following notice and application blank are furnished to applicants for employment in the Library service :

NOTICE TO APPLICANTS FOR EMPLOYMENT.

Applications must be made upon the printed blanks furnished by the Library. Examinations for applicants will be held from time to time as the needs of the service may require. Each applicant will be notified of the examination to be held next after the filing of his application.

The examinations are not strictly competitive. Other capacities being equal, preference will be given to persons attaining the highest mark; but in making selections from among those who have taken the examination, other elements of fitness for the particular positions to be filled will be taken into account.

The purpose of the examination being not to test the intelligence of the applicants by an absolute standard, but rather to range the applicants according to the relative intelligence displayed by them, no absolute pass-mark is fixed; nor is any certificate or diploma given, but candidates will, if they desire, be informed of their relative rank among those who have taken examinations for the same grade.

The examination, moreover, is regarded as a preliminary test, merely. It must be followed by a test of capacity in actual service during a probationary period. And all appointments to the service, even where carrying pay, are provisional and conditioned upon proof of capacity for the particular positions to be filled as shown in actual service.

The entire Library service (excepting the Engineer, Janitor, and Printing Departments and the Bindery, and the Sunday and Evening service which is paid by the hour) is divided into grades. Each grade begins with a minimum salary and progresses, by an annual increase, to a maximum. No such increase, however, will be paid unless the work of the employee has proved satisfactory to the Trustees. The maximum reached, no further increase is possible, except by promotion to a higher grade. Such promotion also is based upon an examination, combined, however, with certificate of capacity from the head of the department in which the employee has served.

The ordinary grades are supposed to provide for positions where academic knowledge is necessary; the special grades for those positions where special capacities (as knowledge of type-writing, executive ability, etc.) are more particularly required.

Applicants for positions in the higher grades must satisfy the examiners of their ability to pass the examinations for all the grades below that for which they make application.

To the above general qualifications must be added in each case such special qualifications as may be requisite for the particular positions to be filled.

HERBERT PUTNAM,
Librarian.

BLANK FOR APPLICATION.

THE PUBLIC LIBRARY OF THE CITY OF BOSTON.

APPLICATION.

I hereby make application to be examined for a position in Grade _____ of the Public Library service of the City of Boston.

As part of my application I declare the answers to the following questions to be true and in my own handwriting.

Each question must be answered or the blank will be returned.

1. Are you married or single?
2. Where do you reside and what is your post-office address?
(Give town or city, including street and number.)
3. How long have you been a resident of said city or town?
4. Are you a citizen of the United States?
5. What is the date and place of your birth?
6. What is your father's and mother's full name? Give name whether living or dead.
7. Have you ever been examined for the public service in any State or city? If so, when, where, for what branch and grade of the service and with what result?
8. Are you in good health? Have you any mental or physical incapacity of which you are aware?
9. What is your present occupation and what has been your past occupation? Give places and dates of employment as near as you can.
10. In what schools, academy or college were you educated? Give the name and length of course in each.
11. Have you any experience or do you possess any special qualifications, such as a knowledge of book-keeping, stenography, typewriting, foreign languages or a familiarity with other branch or branches of knowledge, which in your opinion would be useful in the service of the Public Library, and not included among the requirements for the grade in which you are an applicant?
12. What experience in library work have you had?
13. In what department of this library do you think your capacities would be useful?

[Signature: all names in full.]

Boston, ... 189 .

Any other facts you desire to mention: [Certificates and testimonials may be mentioned, and copies may be enclosed. The originals need not, unless called for.]

When filled out, fold TWICE, as indicated, and return to the Librarian of the Boston Public Library.

APPENDIX XII.

CORRESPONDENCE, BEQUESTS, ETC.

KATE FIELD COLLECTION.

BOSTON, April 20, 1898.

HERBERT PUTNAM, ESQ.,

Librarian, Public Library :

MY DEAR MR. PUTNAM, — Last autumn you most kindly acceded to my desire to be permitted to give to the Library the MSS. and autograph letters, from famous persons, belonging to Kate Field ; and I have just now received, by this morning's mail, a letter from Mr. T. Sanford Beaty, the executor and the chief and residuary legatee of Miss Field, a letter saying : " It seems to me a most charming idea to so preserve dear Miss Field's MSS., and I should certainly advise you to turn them over to Mr. Putnam."

Mr. Beaty has just returned from a long absence ; and while I knew he would approve this, I had no right to do so until I had his official permission. . . .

That Miss Field's memory may be thus " kept green " by a " Kate Field Collection " in the noble Library fulfils the dearest wish of my heart.

Very faithfully yours,
(Signed)

LILIAN WHITING.

LIBRARY OF THE AMERICAN STATISTICAL ASSOCIATION.

BOSTON, MASS., June 16, 1898.

To the Trustees of the Boston Public Library :

GENTLEMEN, — The American Statistical Association, of which General Walker was President for so many years, until the time of his death, and of which Colonel Wright is now President, has a valuable library of statistical works, especially rich in public documents of foreign countries. . . . At the last meeting of the Association, held in April of this year, the Library Committee of the Association was given power to transfer the library to

the Trustees of the Boston Public Library if they were willing to accept the gift, the only condition being that the purely statistical portion of the library should be kept together, and that members of the Association should have free access to the shelves of this collection. In the wish that this collection be kept together, there is no desire, however, to handicap the Public Library in any way in the administration of its work. Undoubtedly there are many public documents which are duplicates of those in the Public Library. If so, those volumes of the Statistical Association should be separated and given to some other institution. Other works which are not of a statistical character, which have found their way into the Library of our Association, should also be separated and shelved according to the general classification now in use by the Public Library.

Yours very truly,

(Signed)

DAVIS R. DEWEY,

Secretary.

I should add that current periodicals and issues received by the Association would be given to the Library at stated dates.

BUST OF SIR WALTER SCOTT.

BOLESIDE, GALASHIELS, N. B., 21st July, 1898.

THE SIR WALTER SCOTT MEMORIAL.

SIR,—The United States Ambassador has sent me your letter to him of the 6th instant, accepting, on behalf of the City of Boston, of the bust of Sir Walter Scott, purchased by the Westminster Committee from Mr. Hutchison, R.S.A., Edinburgh, with their surplus funds, and intended for the Public Library of your city. I shall, accordingly, at once cause the bust to be forwarded to the care of Your Honor. I believe that it will be appreciated, not only as a beautiful work of art, but as affording the citizens of Boston the gratification of having amongst them a very faithful counterpart of the features of that great genius, whose shrine so many of them annually visit. It is a very perfect copy of the famous Chantrey Bust in Abbotsford, and is, as you are aware, a duplicate of that placed last year in Westminster Abbey. I enclose a list of the subscribers to the Westminster Bust, which may not be without interest to the Library Trustees. I have the honor to be, Mr. Mayor,

Your most obedient servant,

(Signed)

RICHARD LEES.

THE HON. JOSIAH QUINCY,

Mayor of Boston, U. S. America.

THE WESTMINSTER COMMITTEE ON THE SIR WALTER SCOTT
MEMORIAL, RICHARD LEES, *Honorary Secretary:*

SIR, — The Trustees of the Public Library in the City of Boston have received from His Honor, Josiah Quincy, Mayor, the Bust of Sir Walter Scott, purchased by the Westminster Committee from Mr. Hutchison, R.S.A., for deposit in this Library.

We are glad to have so faithful a copy of Chantrey's celebrated work among our treasures of literature and art, and we are grateful for the generosity of the subscribers, and still more for the spirit which has prompted the gift.

We recognize in this act of international courtesy a mark of that growing harmony of interests between the two leading powers in the civilization of the world, which, if sometimes latent, always has been strong beneath all disturbing incidents, and which, well directed, may be the assurance of peace and prosperity to the nations of the earth.

The patrons of this Library will always view with admiration the bust of this great magician who touched all the incidents of history, the customs of the period and the eminent characters of the time, bringing them into finished and immortal pictures which have put succeeding ages under grateful obligations.

If Sir Walter's genius was descriptive rather than creative there yet runs through all his writings such a loftiness and purity of moral sentiment that they have furnished the world with a vast amount of cheer and hope, and we rejoice to find that this delight which he has already provided for three generations shows no decline in the readers of a great Public Library to-day.

With highest respect and esteem, the Trustees of the Public Library of the City of Boston :

(Signed) FREDERICK O. PRINCE, *President.*

JOSIAH H. BENTON, JR.,

H. P. BOWDITCH,

JAMES DE NORMANDIE,

SOLOMON LINCOLN.

HERBERT PUTNAM,

Librarian and Clerk of the Corporation.

Dated at Boston, in the Commonwealth of Massachusetts, U.S.A., in the year of our Lord 1898, and of the founding of the city, 269.

ORIGINAL BLOCKS OF WOOD ENGRAVINGS, EXECUTED BY ROBERT
LOUIS STEVENSON.

Care of MITCHELL & BAXTER, W. S., 11 SOUTH CHARLOTTE STREET,
EDINBURGH, SCOTLAND, November 8, 1898.

Secretary, Boston Library:

DEAR SIR, — MRS. R. L. STEVENSON begs me to write and ask you whether the Library would care to receive as a gift a set of twenty-four wood engravings (original blocks) executed by her husband, the well-known novelist? Fac-simile impressions of these blocks were used in the Bonus Volume of the "Edinburgh Edition" of Robert Louis Stevenson's works, and must therefore be already known to you. At present the blocks are in the possession of Messrs. Constable & Co., the Edinburgh printers, who are printing from them a limited number of copies for certain subscribers on the understanding that when the work is completed the blocks shall be handed to a public institution which shall bind itself that they shall never be used again. Would your great Library, therefore, be willing to receive these blocks *on this pledge of never reproducing copies from them?* The blocks are valuable only from the sentiment and association attached to them.

If the Library should be willing to accept them, might I ask you to write accordingly to Mr. Charles Baxter . . . the late Mr. Stevenson's executor — whom I have instructed to send you the blocks on the completion of the volume at present in Messrs. Constable's hands. Mrs. Stevenson is leaving in a week's time for Madeira, where she is to spend the winter, and is therefore unable to take charge of the matter herself.

I remain

Very truly yours,

(Signed)

LLOYD OSBOURNE.

HENRY SARGENT CODMAN MEMORIAL.

BROOKLINE, January 2, 1899.

The Trustees of the Boston Public Library:

GENTLEMEN, — Under date of May 24, 1897, and January 21, 1898, your Board has received from Mr. Charles F. McKim communications with reference to a fund which friends of the late Henry Sargent Codman of Brookline propose to turn over to the Boston Public Library to be known as the Henry Sargent Codman Memorial Fund.

Mr. McKim addressed you as Trustee of the fund, and under date of January 21 he enclosed a check for the amount then on hand, \$2,852.41.

He communicated to you the aim of the donors that the fund should be used "to perpetuate the memory" of Mr. Codman "by keeping alive, maintaining, and from time to time adding to the plants, trees, and other foliage, within the Public Library, provided this should be acceptable to the Trustees."

Since the above was written, consideration has induced the donors of the fund to believe that it might more effectively be utilized in some other way, for instance, particularly by the purchase of books upon landscape gardening.

I am now authorized, acting in behalf of Mr. McKim as well as of the various contributors to the fund, to assent to this disposal of the fund. And this assent applies both to the amount already turned in and to any contributions that may be subsequently added to it.

It is the desire of the donors that a special book-plate shall be inserted in each one of the volumes purchased from the fund, identifying it as part of this memorial collection.

Very truly yours,

(Signed)

M. R. SARGENT.

APPENDIX XIII.

GIFTS.

See also pp. 5, 10, 21, 23, 26-29 of main body of report.

Givers	1,946
Volumes	11,245
Numbers	15,560
Photographs, engravings, etc.	309
Newspaper subscriptions. (Gift of the publishers)	69

1. ENDOWMENTS.

January 2, 1899. From the friends of the late
Henry Sargent Codman for the purchase of
books on landscape gardening, the sum of \$2,852 41

2. WORKS OF ART.

From the Committee on the Scott Memorial in Westminster
Abbey, a copy in marble (by John Hutchison, R.S.A.) of
the bust of Sir Walter Scott by Chantrey.

3. MISCELLANEOUS GIFTS OF MONEY.

From Miss Lilian Whiting, for arranging the Kate
Field Collection of Manuscript Letters, the sum of \$25 00

4. PHOTOGRAPHS, ENGRAVINGS, ETC.

Abbot Memorial Library	1 Photograph.
Anonymous	10 Photographs.
Avery, Samuel P.	2 Engravings.
Ball, William T. W.	1 Silver Medal.
Barnard, James M.	1 Photograph.
Bayridge Free Library	1 “
Boston City Hospital	2 Photographs.
Boston Browning Society	3 “
Brockton Public Library	2 “
Brown, Dr. Francis H.	4 Engravings.
Bullivant, William M.	1 Bronze Medal.
Carnegie Free Library	1 Photograph.
Butte Free Public Library	2 Photographs.
Case Memorial Library	2 “
Chevalier, Samuel A.	1 Photograph.
Columbia University	1 Photograph and 1 Bronze Medal.
Coolidge, Baldwin	3 Photographs.
Curtis & Cameron	4 “
Erie Public Library	3 Illustrations.

Everett, Fred E.	1 Photograph.
Fleischner, Otto	18 Photographs.
Foster, John R., and Stephen B.	7 " "
Foster, William E.	9 " "
Gail Borden Public Library	1 Photograph.
Green, <i>Dr.</i> Samuel A.	1 Engraving.
Greenough, J. F.	4 Drawings.
Groton Public Library	1 Engraving.
Hamilton Public Library	4 Photographs.
Hartford Free Library	1 Photograph.
Heaton, A. G.	1 " "
Hubbard Free Library	3 Photographs.
Iconographic Society	1 Etching.
Illinois College, Jones Memorial Library, ...	1 Engraving.
Indianapolis Public Library	1 Photograph.
James Prendergast Free Library	1 " "
King, George R.	9 Photographs.
Knapp, Arthur Mason	1 Photograph.
Meekin's Library	1 " "
Monks, <i>Dr.</i> George H.	117 Photographs and Engravings, 2 Water Colors.
New York Public Library	4 Photographs.
Omaha Public Library	1 Photograph.
Osterhout Free Library	1 " "
Pasadena Public Library	1 " "
Peck Memorial Library	1 " "
Perabo, Ernst	2 Photographs.
Putnam, <i>Misses</i> Shirley and Brenda	1 Drawing (framed).
Richards Library	1 Photograph.
San Francisco Mercantile Library	5 Photographs.
Sargent, <i>Dr.</i> Dudley A.	6 " "
Small, Maynard & Co.	27 Photographs and Prints.
Smith, <i>Miss</i> Sarah S.	1 Engraving.
Stevenson, <i>Mrs.</i> Robert Louis	24 Wooden Blocks, engraved by Mr. Stevenson.
Stokes, <i>Miss</i> Caroline P.	1 Engraving (framed).
Switzerland. Bureau International des Administrations Télégraphiques	8 Charts.
Tufts Library	1 Photograph.
United States Naval Academy	2 Photographs.
Warren, Samuel M.	1 Copperplate.
Watts de Peyster Library	1 Print.
Whitney, James L.	13 Photographs.
Winona Free Public Library	2 " "
Winslow, <i>Lieut.-Com.</i> Herbert, U.S.N., ...	1 Photograph.
Winther, Charles A. G.	1 Engraving.

5. BOOKS, NEWSPAPERS AND PERIODICALS.

	Vols.	Nos.
Abbott, Rev. Edward, <i>Cambridge, Mass.</i>		585
Abbott, Dr. Samuel W.		24
Abbott Memorial Library, <i>Dexter, Me.</i> 1 plan		
Aberdeen Public Library, <i>Aberdeen, Scotland</i>	1	2
Academy of Medicine of Cincinnati, <i>Cincinnati, O.</i>	1	
Academy of Natural Sciences, <i>Philadelphia, Pa.</i>		1
Academy of Science of St. Louis, <i>St. Louis, Mo.</i>		8
Actors' Fund of the United States of America, <i>New York City</i>		1
Adadourian, Rev. Haig, <i>Plymouth, Mass.</i>	1	
Adam, Robert B., <i>Buffalo, N.Y.</i>	1	
Adams, Andrew N., <i>Fair Haven, Vt.</i>	2	
Adams, Hon. Charles Francis, <i>Lincoln, Mass.</i>	4	
Adams, Charles Francis, <i>Sherborn, Mass.</i>	1	
Adams, J. L., <i>New York City</i> 1 map		
Adams Nerve Asylum		1
Adler, Simon L., <i>Rochester, N.Y.</i>	1	
Aguilar Free Library, <i>New York City</i>		1
Alabama. Department of Agriculture, <i>Montgomery</i>	1	
Albany Medical College, <i>Albany, N.Y.</i>		1
— Alumni Association		21
Alden, Rev. E. J., <i>Chicago, Ill.</i>	1	
Alden, William H., <i>Philadelphia, Pa.</i>	1	
Alden & Harlow, <i>Pittsburgh, Pa.</i> 5 plans		
Alexander, De Alva Stanwood, <i>Buffalo, N.Y.</i>	1	
Alfred University, <i>Alfred, N.Y.</i>		1
Alkaloidal Clinic, Publishers of, <i>Chicago, Ill.</i>		2
Allen, Edward G., <i>London, England</i>	3	
Allen, George H.	1	
Allen, Hon. William V., <i>Washington, D.C.</i>		1
Allison, Dr. H. E., <i>Fishkill-on-Hudson, N.Y.</i>	2	1
Allyn, Mrs. E. G., <i>Dubuque, Iowa</i> 2 pieces of music		
Ambrozovic, Bela, <i>Vienna, Austria</i>	4	
American Academy of Arts and Sciences	1	1
American Agriculturist Library, <i>Springfield, Mass.</i>	2	
American Antiquarian Society, <i>Worcester, Mass.</i>	2	
American Association for the Advancement of Science, <i>Salem, Mass.</i>	3	
American Baptist Home Mission Society, <i>New York City</i>	1	
American Bible Society, <i>New York City</i>	1	1
American Catholic Historical Society, <i>Philadelphia, Pa.</i>		1
American Citizen 1898-99 subscription		
American Climatological Association, <i>Philadelphia, Pa.</i>	1	
American Colonization Society, <i>Washington, D.C.</i>		1
American Congregational Association		1
American Druggist Publishing Co., <i>New York City</i>	2	2
American Geographical Society, <i>New York City</i>	1	
American Historical Association, <i>Washington, D.C.</i>		
— 1 broadside		2
American Homes Publishing Co., <i>Knoxville, Tenn.</i>		
— 1898-99 subscription		
American Institute of Architects, <i>Providence, R.I.</i>		2
American Institute of Mining Engineers, <i>New York City</i>	1	
American-Irish Historical Society	8	
American Jewess Publishing Co., <i>New York City</i>	1	
American Laryngological Association, <i>Washington, D.C.</i>	1	
American Library Association		1
American Missionary Association, <i>New York City</i>		15
American Museum of Natural History, <i>New York City</i>	3	4

	Vols.	Nos.
American New Church Tract and Publication Society, <i>Philadelphia, Pa.</i>		2
American Numismatic and Archæological Society, <i>New York City</i>		1
American Otological Society, <i>New Bedford, Mass.</i>	1	1
American Park and Out-door Art Association		3
American Philosophical Society, <i>Philadelphia, Pa.</i>	1	2
American School of Correspondence	1	
American Seamen's Friend Society, <i>New York City</i>	1	5
American Society for the Prevention of Cruelty to Animals, <i>New York City</i>	1	1
American Society of Civil Engineers, <i>New York City</i>	1	
American Society of Naturalists, <i>Providence, R.I.</i>		9
American Society of Railroad Superintendents, <i>Asbury Park, N.J.</i>		1
American Society of Superintendents of Training Schools for Nurses, <i>New York City</i>	2	
American Statistical Association	5,000	
American Surgical Association, <i>Philadelphia, Pa.</i>	1	
American Unitarian Association		3
American Water Works Association, <i>New York City</i>	4	
Americanische Turnzeitung, <i>Milwaukee, Wis.</i>		
1898-99 subscription		
Ames, George		1
Amherst College, <i>Amherst, Mass.</i>		2
Amherst Student, Editors of, <i>Amherst, Mass.</i>	1	
Ammon, Dr. Otto, <i>Karlsruhe, Baden, Germany</i>	1	
Ancient and Honorable Artillery Company	1	
Andover Theological Seminary, <i>Andover, Mass.</i>		1
Andover Theological Seminary, Alumni Association, <i>Andover, Mass.</i>		3
Andrews, Charles L., <i>Augusta, Me.</i>	1	
Andrian-Werburg, Ferdinand, <i>Freiherr von, Vienna, Austria</i>		5
Anonymous	2 maps	74
Apollo Iron & Steel Co., <i>Pittsburg, Pa.</i>	1 broadside	
Apollonio, Miss Mabel S.		68
Appalachian Mountain Club	1	
Appleton, D. F., <i>Ipswich, Mass.</i>	1	
Appleton, Francis H.	1	
Appleton, William S.	2	803
Apprentices' Library Company of Philadelphia, <i>Phila- delphia, Pa.</i>		1
Arbo, Major C. O. E., <i>Drammen, Norway.</i>	1	
Argus (Swedish)		
1898-99 subscription		
Arkansas Agricultural Experiment Station, <i>Fayetteville, Ark.</i>		3
Armour Institute of Technology, <i>Chicago, Ill.</i>		1
Armstrong, R. M.		3
Arnold, F. E., <i>Braintree, Mass.</i>	1	
Arnold, Howard P.	58	
Art Club of Philadelphia, <i>Philadelphia, Pa.</i>	1	1
Asociación Salitrera de Propaganda, <i>Iquique, Chile</i>		3
Associated Charities of Cambridge, <i>Cambridge, Mass.</i>		1
Association of American Medical Colleges, <i>Chicago, Ill.</i>	1	
Association of American Physicians, <i>Philadelphia, Pa.</i>	1	
Association of Engineering Societies, <i>Philadelphia, Pa.</i>	2	
Astronomical Society of the Pacific, <i>San Francisco, Cal.</i>		1
Atherton, Henry B., <i>Nashua, N.H.</i>	1	
Atkins, Dr. Francis H.	1	
Atkinson, Hon. Edward	7	1
Atlanta University, <i>Atlanta, Ga.</i>		2
Australian Association for the Advancement of Science, <i>Sydney, New South Wales</i>	1	

	Vols.	Nos.
Australian Museum, <i>Sydney, New South Wales</i>	22	23
Avery, <i>Hon. Elroy M., Cleveland, O.</i>		4
Avery, <i>Samuel P., New York City</i>		1
Axon, <i>William E. A., Manchester, England</i>	2	
Ayer, <i>Prof. Charles C., Boulder, Col.</i>	1	
Ayer, <i>Rev. Joseph C., Jr., Nantucket, Mass.</i>	2	
Bacon, <i>William P., New Britain, Conn.</i>		1
Bailey, <i>Andrew J.</i>	1	
Baillie's Institution Free Library, <i>Glasgow, Scotland</i>		1
Baker, <i>Marcus, Washington, D.C.</i>		1
Baker, <i>Walter, & Co.</i>	119	
Baker, <i>Hon. William C., Providence, R.I.</i>	1	
Baldwin, <i>Prof. J. Mark, Princeton, N.J.</i>		1
Ball, <i>T. R., Baltimore, Md.</i>		4
Ball, <i>William T. W.</i>	12	
Balmaseda, <i>Francisco J., Havana, Cuba</i>	3	
Baltimore, <i>Md., Sewerage Commission</i>	1	
Bangor Public Library, <i>Bangor, Me.</i>		1
Bangs, <i>Outram</i>		10
Barker, <i>Wharton, Philadelphia, Pa.</i>	1	
Barnard, <i>James M.</i>	16	6
Barnard Memorial		1
Barnes, <i>Dr. Henry J.</i>	2	
Barnes, <i>William A.</i>	1	
Barney, <i>Dr. Charles N.</i>	1	
Barnicoat Fire Association	1	1
Barre, <i>Mass., Town of</i>		57
Barrow-in-Furness Free Public Library, <i>Lancashire, Eng- land</i>		1
Barrows, <i>Hon. Samuel J., Washington, D.C.</i>		4
Barry, <i>Rev. Henry A.</i>	1	
Bartlett, <i>Prof. Dana P.</i>	1	
Bassett, <i>F. G., Seymour, Conn.</i>		1
Batchelder, <i>Dr. F. P.</i>	8	
Bates, <i>Waldron</i>	2 maps	
Batsford, <i>B. T., London, England</i>	1	
Battersea Public Library, <i>London, England</i>		1
Baxter, <i>Sylvester, Malden, Mass.</i>	6	1
Bayridge Free Library, <i>Bayridge, L.I.</i>	1 plan	
Beacon	2 1898-99 subscriptions	
Beddoe, <i>Dr. John, Paisley, Scotland</i>	2	
Bedford, <i>Augustus</i>	3	
Beer, <i>William, New Orleans, La.</i>	1 newspaper	
Belfast Library, <i>Belfast, Ireland</i>		1
Bell, <i>Prof. Alexander Graham, Washington, D.C.</i>	3	
Belling, <i>Prof. Karl J., Worcester, Mass.</i>	1	
Benevolent Fraternity of Churches		1
Bennington Battle Monument and Historical Association, <i>Bennington, Vt.</i>	1	
Bent, <i>Allen H.</i>	1	1
Benton, <i>Josiah H., Jr.</i>	1 map	6
Berkeley Divinity School, <i>Middletown, Conn.</i>		1
Berkshire Baptist Association, <i>Pittsfield, Mass.</i>		2
Berle, <i>Rev. Adolph A., Brighton, Mass.</i>	1	
Berlin, <i>Germany, Koeniglich-Preussische Friedrich Wil- helm's Universitat</i>		2
Bernice Pauahi Bishop Museum of Polynesian Ethnology and Natural History, <i>Honolulu, Hawaiian Islands</i>		1
Bertholon, <i>Dr. L., Tunis, Africa</i>	3	
Biagi, <i>Prof. Guido, Florence, Italy</i>	1	
Bigelow, <i>Mrs. Andrew, Southboro', Mass.</i>	2	
Bimetallic League, <i>Manchester, England</i>		3

	Vols.	Nos.
Bingham, <i>Hon. Harry, Littleton, N.H.</i>	1	
Biological Society of Washington, <i>Washington, D.C.</i>	2	4
Birkenhead Free Public Libraries, <i>Birkenhead, England</i>	1	
Birmingham, <i>England</i> , Free Libraries Committee		1
Blackett, Spencer C., <i>London, England</i>	1	
Blaisdell, Frank C.	47	111
Bliss, <i>Rev. W. D. P., San Gabriel, Cal.</i> 58 broadsides	301	82
Boardman, Samuel L., <i>Bangor, Me.</i>	1	
Bogelot, <i>Mme. Isabelle, Paris, France</i>	2	2
Bolles, <i>Dr. William P.</i>	2	63
Bolton, Charles K. 1 broadside	2	
Bolton, <i>Prof. H. Carrington, Washington, D.C.</i>	3	
Bolton Public Library, <i>Bolton, England</i>		1
Bonney, Charles L., <i>Chicago, Ill.</i>	1	
Boston. Assessing Department	2	
—— Board of Election Commissioners	16	
—— Board of Health	1	2
—— Board of Overseers of the Poor	2	
—— Board of Police	1	4
—— Cemetery Department		2
—— City Auditor	7	2
—— City Clerk		2
—— City Hospital	1	
—— City Messenger 3 maps	127	1
—— City Treasurer	1	
—— Collecting Department	2	
—— Department of Municipal Statistics	2	15
—— Engineering Department	1	
—— Fire Department		2
—— Institutions Department	1	
—— Law Department		1
—— Park Commissioners		1
—— Penal Institutions Department	1	
—— Printing Department	1	
—— Public Buildings Department	5	
—— Public Grounds Department		1
—— Registry Department	15	3
—— School Committee	46	28
—— Street Laying-Out Department	3	
—— Water Department	6	
—— Wire Department	4	
Boston Art Club		2
Boston Associated Charities		1
Boston Athenæum		1
Boston Browning Society	37	
Boston Budget 1898-99 subscription		
Boston Chamber of Commerce	1	
Boston Children's Aid Society		3
Boston College	2	
Boston Courier 1898-99 subscription		
Boston Daily Advertiser 1898-99 subscription		
Boston Daily Globe 2 1898-99 subscriptions		
Boston East Baptist Association, <i>Reading, Mass.</i>		2
Boston Evening Transcript 12 1898-99 subscriptions	3	
Boston Fish Bureau		2
Boston Floating Hospital		1
Boston Herald 2 1898-99 subscriptions		
Boston Ideas 1898-99 subscription		
Boston Insane Hospital		1
Boston Journal 2 1898-99 subscriptions	5	
Boston Medical Society		1
Boston Museum of Fine Arts	1	4

	Vols.	Nos.
Boston Mycological Club, <i>Cambridge, Mass.</i>		5
Boston North End Mission		10
Boston Parents' Association for Deaf Children		2
Boston Post 2 1898-99 subscriptions		
Boston Protective Department		1
Boston Provident Association		7
Boston Society of Medical Sciences	1	
Boston Society of Natural History	3	
Boston Telegraph 1898-99 subscription		
Boston Times 1898-99 subscription		
Boston Traveler 2 1898-99 subscriptions		
Boston University	6	302
Boston Veteran Firemen's Association		1
Boston Young Men's Christian Association		1
Boston Young Men's Christian Union		1
Bostoner Anzeiger 1898-99 subscription		
Bostonian Society		1
Botanical Society of America, <i>St. Louis, Mo.</i>	1	
Botume, J. Frank	2	
Boutwell, <i>Hon.</i> George S.	3	
Bowditch, <i>Prof.</i> Henry P.	22	303
Bowditch, <i>Miss</i> Olivia Y.	27	
Bowdoin College, <i>Brunswick, Me.</i>		3
Bowdoin College Library, <i>Brunswick, Me.</i>		6
Boys' Institute of Industry		3
Brabrook, E. W., <i>London, England</i>	1	3
Bradbury, Benjamin F.	1	
Bradford, <i>Dr.</i> Edward H.	3	
Bradford, <i>England</i> , Public Free Libraries		1
Bradlee, <i>Mrs.</i> Caleb D., <i>Brookline, Mass.</i>	11	133
Bradley, Milton, & Co., <i>Springfield, Mass.</i>	1	
Brady, <i>Prof.</i> J. Everett, <i>Northampton, Mass.</i>	1	
Bramhall, Frank J., <i>Chicago, Ill.</i>		1
Breck, Joseph, & Sons	1	
Brent, <i>Rev.</i> Charles H.	3	
Brinton, <i>Dr.</i> Daniel G., <i>Media, Pa.</i>	13	
Brisco, John Potter, <i>Nottingham, England</i>	1	1
British and Foreign Bible Society, <i>London, England</i>	3	
British and Foreign Unitarian Association, <i>London, Eng- land</i>		1
Bromley Public Library, <i>Bromley, Kent, England</i>		1
Brookline Education Society, <i>Brookline, Mass.</i>		1
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— Library	1	
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Society of Arts, <i>London, England</i>	1	8
Society of Colonial Daughters of the Seventeenth Cen- tury, <i>Brooklyn, N.Y.</i>	1	
Society of Colonial Wars, <i>Massachusetts</i>	1	
Society of Colonial Wars, <i>Missouri, Bethany, Mo.</i>	1	
Society of Naval Architects and Marine Engineers, <i>New York City</i>		1
Society of St. Vincent de Paul	2	5
Soldiers' Home in Massachusetts, Trustees of, <i>Chelsea, Mass.</i>		9
Somerville Public Library, <i>Somerville, Mass.</i>	2	1
Sons of the American Revolution, District of Columbia Society, <i>Washington, D.C.</i>	1	
Sons of the Revolution in the State of New York, <i>New York City</i>	1	
Sons of the Revolution, <i>Missouri Society, Bethany, Mo.</i>	1	
Sons of the Revolution, <i>Pennsylvania Society, Philadel-phia, Pa.</i>	1	1

	Vols.	Nos.
South Australia. Woods and Forests Department, <i>Adelaide</i>		2
South Dakota Agricultural Experiment Station, <i>Brook- ing, S.D.</i>		5
South End House		4
South End Industrial School		1
South Shields, <i>England</i> , Public Library and Museum		1
Southbridge, <i>Mass.</i> , Public Library		1
Southern Railway Co., <i>Washington, D.C.</i>	1	
Southern Workman, <i>Hampton, Va.</i>	1	
Spatula Publishing Co.		2
Spear, William G., <i>Quincy, Mass.</i>		
1 broadside, 2 newspapers	12	5
Spofford, C. B., <i>Claremont, N.H.</i>	1	
Spokesman-Review, <i>Spokane, Wash.</i> 1898-99 subscription		
Sprague, Frank W.	1	
Springfield City Library Association, <i>Springfield, Mass.</i>		
1 broadside		4
Sproull, Lyman H., <i>Cripple Creek, Col.</i>	1	
Squibb, Drs. Edward R., E. H., and Charles F., <i>Brook- lyn, N.Y.</i>	1	
Stanford, Rev. Arthur W., <i>Kobé, Japan</i>	1	
Stedman, Dr. Henry R.		1
Stevens, Hazard	2	
Stillman, James W.	2	
Stimson, John W., <i>New York City</i>	1	
Stirling's and Glasgow Public Library, <i>Glasgow, Scotland</i> , ...		1
Stockholm, <i>Sweden</i> , Kongliga Biblioteket		1
—— Sveriges Offentliga Bibliotek	5	
Stoeckel, Mr. and Mrs. Carl, <i>Norfolk, Conn.</i>	2	
Stokes, Miss Caroline P., <i>New York City</i>		1
Stokes, Thomas T.		1
Stolz, Rabbi Joseph, <i>Chicago, Ill.</i>	1	
Storrs Agricultural Experiment Station, <i>Middletown, Conn.</i>	1	3
Street Railway Publishing Co., <i>New York City</i>		1
Stuckenberg, Prof. John H. W., <i>Cambridge, Mass.</i>	2	
Sturgis, Mrs. Robert S.	18	
Sturtevant, B. F., Co.	1	
Suffolk County, <i>Mass.</i> , House of Correction		1
Suffolk County Historical Society, <i>New York City</i>	1	1
Suffolk Registry of Deeds	2	
Sumner, Prof. William G., <i>New Haven, Conn.</i>	2	
Sunday Times, <i>Minneapolis, Minn.</i> 1898-99 subscription		
Superintendent and Foreman, Publishers of	1	
Superior Leader, <i>Superior, Wis.</i> 1898-99 subscription		
Supple, Bernard F.	5	
Swank, James M., <i>Philadelphia, Pa.</i>	1	
Swift, Lindsay	1	1
Switzerland. Bureau Fédéral de Statistique, <i>Berne</i> , ...	3	2
—— Bureau Fédéral des Assurances, <i>Berne</i>	1	
—— Bureau International des Administrations Télé- graphiques		1
Sydney, <i>New South Wales</i> , Free Public Library	1	2
—— Patents Office	5	
Taber, C. A. M., <i>Wakefield, Mass.</i>	1	
Tanaka, I., <i>Tokio, Japan</i>	2	
Tapper, Thomas, Jr.	2	
Taunton Public Library, <i>Taunton, Mass.</i>		1
Taylor, Col. Charles H.	2	
Taylor, Rev. E. O.	1	
Tebb, William, <i>Surrey, England</i>	1	

	Vols.	Nos.
Teller, <i>Hon. Henry M., Washington, D.C.</i>	1	
Temporary Asylum for Discharged Female Prisoners, <i>Dedham, Mass.</i>		1
Tennessee University Magazine, Editors, <i>Knoxville, Tenn.</i>	1	
Terzian, <i>Prof. Dikran</i>	1	1
Texas. Secretary of State, <i>Austin</i>	1	
Texas Agricultural Experiment Station, <i>College Station, Tex.</i>		4
Texas State Historical Association, <i>Austin, Tex.</i>	1	
Thayer Academy, <i>Braintree, Mass.</i>		1
Thielsch, <i>E. A.</i>	2	
Thirteenth Massachusetts Regiment Association		1
Thomas Crane Public Library, <i>Quincy, Mass.</i>	1	
Thorndike, <i>Dr. Paul</i>	3	
Thrift Publishing Co., <i>New York City</i>		1
Tiffany, <i>Edward</i>	1	
Tileston, <i>Mrs. John B.</i>	29	
Tobey, <i>Rev. Rufus B.</i>	2	
Tompkins, <i>Eugene</i>	1	
Tonge, <i>Thomas, Denver, Col.</i>	1	
Topinard, <i>Dr. Paul, Paris, France</i>	1	
Toronto Public Library, <i>Toronto, Canada</i>		1
Towle Manufacturing Co., <i>Newburyport, Mass.</i>	1	
Trades Publishing Co., <i>Philadelphia, Pa.</i>	1	
Trans-Mississippi and International Exposition, Department of Publicity, <i>Omaha, Neb.</i>		2
Trask, <i>William B.</i>	1	
Traubel, <i>Horace L., Camden, N.J.</i>	1	
Tribunali, <i>Milan, Italy</i>		1898 subscription
Trinity College, <i>Hartford, Conn.</i>		1
Trowbridge, <i>Francis B., New Haven, Conn.</i>	1	
Tucker, <i>Mrs. F. M.</i>	1	
Tufts College, <i>Somerville, Mass.</i>	2	12
— Library		1
Tufts College Publishing Association, <i>Somerville, Mass.</i>	1	
Tufts Library, <i>Weymouth, Mass.</i>		2
Tulane University of Louisiana, <i>New Orleans, La.</i>		2
Turner, <i>William G. A.</i>	1	
Tweedie, <i>Mrs. Alec, London, England</i>	3	
Twentieth Century Club,		1
Twentieth Century Club, Tenement House Committee	1	
Twentieth Regiment Association, <i>M.V.I.</i>	21	
Tyler, <i>Henry D., New York City</i>		1 map
Union Church		1
United Hebrew Charities of the City of New York		6
United States. Civil Service Commission, <i>Washington, D.C.</i>	2	
— Commission of Fish and Fisheries	6	
— Department of Agriculture	4	6
— Division of Biological Survey		3
— Division of Agrostology		2
— Division of Publications	1	29
— Division of Statistics		2
— Library		4
— Weather Bureau	5	68
— Department of the Interior	5	23
— Board of Indian Commissioners	5	
— Bureau of Education	8	3
— Census Office	7	
— Geological Survey	25	26
— Patent Office	12	1
— Department of Labor	3	1

	Vols.	Nos.
United States. Department of the Navy	2	
Bureau of Navigation 1 map		1
Hydrographic Office	1	8
Judge-Advocate General		1
Naval War Records Office	3	
Office of Naval Intelligence		1
Department of State	5	7
Bureau of Rolls and Library		2
Bureau of the American Republics	2	2
Department of the Treasury 6 broadsides	18	15
Bureau of Immigration	7	3
Bureau of Navigation	4	
Bureau of Statistics	2	10
Coast and Geodetic Survey	3	4
Comptroller of the Currency	1	
Life Saving Service	1	
Light-House Board	1	
Marine Hospital Service		1
Department of War 1 broadside	2	3
Chief of Engineers	2	
Library	1	
Surgeon-General	1	
War Records Office	15	1
Interstate Commerce Commission	2	1
Library of Congress	2	
Military Academy, <i>West Point, N.Y.</i>		8
Naval Institute, <i>Annapolis, Md.</i>		1
Naval Observatory	1	2
Post Office Department	1	1
Superintendent of Documents	406	146
Universalist General Convention		1
Universalist Publishing House		2
Universität Basel, <i>Basel, Switzerland</i>		1
Université Laval, <i>Quebec, Canada</i>		1
University of California, <i>Berkeley, Cal.</i>	3	1
Library, <i>Berkeley, Cal.</i>	1	5
University of Chicago, <i>Chicago, Ill.</i>	2	2
Yerkes Observatory, <i>Chicago, Ill.</i>	1	2
University of Colorado, <i>Boulder, Col.</i>		1
University of Idaho, <i>Moscow, Idaho</i>	1	
University of Illinois, <i>Urbana, Ill.</i>		1
University of Kansas, <i>Lawrence, Kan.</i>	3	2
University of Michigan. General Library, <i>Ann Arbor, Mich.</i>	1	
Graduate School, <i>Ann Arbor, Mich.</i> 1 broadside		1
University of Nebraska, <i>Lincoln, Neb.</i>	3	11
University of Pennsylvania, <i>Philadelphia, Pa.</i>	2	1
Department of Archæology and Palæontology, <i>Philadelphia, Pa.</i>	1	
Department of Dentistry, <i>Philadelphia, Pa.</i>		1
Free Museum of Science and Art, <i>Philadelphia, Pa.</i>		3
University of Rochester, <i>Rochester, N.Y.</i>	1	
University of Tennessee, <i>Knoxville, Tenn.</i>		1
University of the State of Missouri, <i>Columbia, Mo.</i>		1
University of the State of New York, <i>Albany, N.Y.</i>	10	
State Entomologist, <i>Albany, N.Y.</i>	1	
State Library, <i>Albany, N.Y.</i>	13	26
University of Toronto, <i>Toronto, Canada</i>	6	
University of Vermont, <i>Burlington, Vt.</i>		1
University of Virginia, <i>Charlottesville, Va.</i>	3	1
University of Wisconsin, <i>Madison, Wis.</i>	1	4

	Vols.	Nos.
University Library, <i>Madison, Wis.</i>		6
University of Wyoming, <i>Laramie, Wy.</i>		1
University Press, <i>Knoxville, Tenn.</i>		1
Upsala, <i>Sweden, Kongliga Universitet</i>	2	1
Uruguay. Bureau d'Echanges Internationaux, <i>Montevideo</i>		7
— Direccion de Estadística General, <i>Montevideo</i>	1	
— Oficina de Depósito. Reparto y Canje, <i>Montevideo</i>	1	9
Utah Agricultural Experiment Station, <i>Logan, Utah</i>		6
Utrecht, <i>Holland, Bibliotheque de l'Université</i>	35	
Uxbridge, <i>Mass., Thayer Memorial Library</i>	1	1
Valentine, John J., <i>San Francisco, Cal.</i>	1	
Vance, Mrs. Frank L., <i>Milwaukee, Wis.</i>	2	
Vancouver Board of Trade, <i>Vancouver, British Columbia</i>		1
Van Nostrand Co., <i>New York City</i>		1
Vermont Agricultural Experiment Station, <i>Burlington, Vt.</i>		5
Vermont State Library, <i>Montpelier, Vt.</i>	8	
Vermont State Medical Society, <i>Burlington, Vt.</i>	1	
Veeder, Dr. Major A., <i>Lyons, N.Y.</i>	1	
Venezuela. Legación de los Estados Unidos de Venezuela. <i>Washington, D.C.</i>	3	
Very, Miss Lydia L. A., <i>Salem, Mass.</i>	2	
Victoria. Patent Office, <i>Melbourne</i>	1	
Victoria Public Library of Western Australia, <i>Perth, Western Australia</i>	2	
Victoria Street Society for the Protection of Animals from Vivisection, <i>London, England</i>	2	
Victoria University, <i>Toronto, Canada</i>	1	
Vienna, <i>Austria, Departement für Statistik</i>	1	
Vineland Historical and Antiquarian Society, <i>Vineland, N.J.</i>		1
Virginia. Secretary of State, <i>Richmond</i>		1
Virginia Agricultural Experiment Station, <i>Blacksburg, Va.</i>		8
Virginia Historical Society, <i>Richmond, Va.</i>	2	
Volckmar, F., <i>Leipzig, Germany</i>		
1898-99 subscription to Nea Emera. <i>Washington, D.C.</i>	2	33
Wade, Joseph M.	1	
Wadsworth, Dr. Marshman E. <i>Houghton, Mich.</i>		7
Wagner Free Institute of Science, <i>Philadelphia, Pa.</i>	1	
Walker, David R., <i>Philadelphia, Pa.</i>	1	
Walker, Edwin C., <i>New York City</i>	1	
Walker, Horace E., <i>Claremont, N.H.</i>	1	
Wallace, Miss Anne, <i>Atlanta, Ga.</i>	1	
Walsh, Dr. John F., <i>Camden, N.J.</i>	1	
Walton, Dr. George L.	1	
Walton, Josiah P., <i>Muscataine, Ia.</i>		1
Wanamaker, John, <i>Philadelphia, Pa.</i>	1	
Ward, John, <i>New York City</i>		1
Ware, Arthur L.	1	
Ware, William, & Co.		2
Warner, Gen. Adoniram J., <i>Washington, D.C.</i>		1
Washburn, Prof. Frederick L., <i>Eugene, Ore.</i>	1	1
Washburn, William D., Jr., <i>Minneapolis, Minn.</i>		1
Warren, Samuel M.	161	209
Washington, D.C., Board of Trustees of Public Schools		1
Watertown Free Public Library, <i>Watertown, Mass.</i>		1
Washington and Lee University, <i>Lexington, Va.</i>		2
Washington City Free Library, <i>Washington, D.C.</i>		1
Washington University. Department of Civil Engineering, <i>St. Louis, Mo.</i>	1	

	Vols.	Nos.
Watchman Publishing Company	2	
Wayland, J. A., <i>Girard, Kan.</i>		1
Wayland, <i>Mass.</i> , Town of		2
Wead, Leslie C., <i>Brookline, Mass.</i>		
4 broadsides, 5 maps, 14 newspapers	27	
Weekly Gazette, <i>Colorado Springs, Col.</i>		
1898-99 subscription		
Weeks, Stephen B., <i>Washington, D.C.</i>	1	
Weir, Robert S., <i>Montreal, Canada</i>	1	
Weisbach, Dr. Augustin, <i>Sarajevo, Bosnia</i>	12	
Wellesley College, <i>Wellesley, Mass.</i>		1
Wenckebach, Prof. Carla	1	2
Wesleyan University, <i>Middletown, Conn.</i>	2	
West Church Parish Library	1	
West Virginia. Chief Mine Inspector, <i>Charleston, W. Va.</i>		
Western Australia. Department of Lands and Surveys, <i>Perth.</i>	2	
Patent Office, <i>Perth.</i>	2	27
Western Reserve University, <i>Cleveland, O.</i>	1	1
Westford, <i>Mass.</i> , J. V. Fletcher Library	1	
Wheeler, Prof. Benjamin Ide, <i>Ithaca, N.Y.</i>	1	
Wheeler, Henry M., <i>Worcester, Mass.</i>	17	24
Wheelwright, Andrew C.	2	
Wheelwright, Edmund M.	11	89
Wheelwright, Edward	1	
White, Miss Caroline L., <i>New Haven, Conn.</i>		2
Whitefield Public Library, <i>Whitefield, N.H.</i>	11	
Whiting, Miss Lillian		1
Whitman College, <i>Walla Walla, Wash.</i>	1	
Whitmore, William H.	1	1
Whitney, Edward B., <i>New York City</i>	1	
Whitney, Prof. Henry M., <i>Beloit, Wis.</i>	19	47
Whitney, James L.	20	30
Whitney, Prof. Josiah D., Estate of, <i>Cambridge, Mass.</i>	1	
Whitney, William H.	1	
Whittelsey, Charles B., <i>Hartford, Conn.</i>		2
Wigan Free Public Library, <i>Wigan, England</i>		
Wiggin, James B., <i>Cambridgeport, Mass.</i>	1	1
Wiggin, Rev. James H.		1
Wilder, Prof. Burt G., <i>Ithaca, N.Y.</i>		
Wilkes-Barré Times, <i>Wilkesbarré, Pa.</i>		
1898-99 subscription		
Williams, Rev. Edward F., <i>Chicago, Ill.</i>	1	
Williams, George H.	8	
Willis, Dr. John L. M., <i>Eliot, Me.</i>		1
Williston Seminary, <i>Easthampton, Mass.</i>		1
Wilmington Institute, <i>Wilmington, Del.</i>	2	
Wilson, Louis N., <i>Worcester, Mass.</i>	1	
Wiltse, Henry M., <i>Chattanooga, Tenn.</i>	1	
Winchester, <i>Mass.</i> , Town of		2
Winchester Home Corporation for Aged Women		1
Winn, Hon. Henry		
Winona Free Public Library, <i>Winona, Minn.</i>	1	
Winslow, Dr. W. H., <i>Vineyard Haven, Mass.</i>		1
Winthrop Public Library, <i>Winthrop, Mass.</i>	1	
Wisconsin. Secretary of State, <i>Madison</i>	2	
State Board of Health, <i>Madison</i>		
Wisconsin Agricultural Experiment Station, <i>Madison, Wis.</i>		7
Wisconsin Free Library Commission, <i>Madison, Wis.</i>	2	1
Wisconsin State Historical Society, <i>Madison, Wis.</i>	13	
Withington, Dr. Charles F.	1	

	Vols.	Nos.
Wittig, Edward C.	8	
Woburn Public Library, <i>Woburn, Mass.</i>		1
Wolcott, Governor Roger	1	
Wolverhampton Free Library Committee, <i>Wolverhampton, England</i>		2
Woman's American Baptist Home Mission Society	1	
Woman's Board of Missions of the Congregational Church	2	
Woman's Medical College of Pennsylvania, <i>Philadelphia, Pa.</i>	1	1
— Students' Association	1	
Woman's Medical College of the New York Infirmary for Women and Children, <i>New York City</i>		1
Woman's Relief Corps, Department of Massachusetts	1	
Woman's Voice 1898-99 subscription		7
Women's Educational and Industrial Union		6
Women's Institute Library, <i>London, England.</i> 1 broadside	2	
Wood, Allen F., <i>New York City</i>	1	
Wood, Henry	2	
Wood Music Co.	1	
Woodbridge, S. Homer		1
Woodbury, Charles J. H.	1	
Woodruff, Rev. C. Eveleigh, <i>Faversham, England</i>	1	
Woodruff, Thomas T., <i>La Junta, Col.</i>	2	
Worcester, Mass., City of	3	
Worcester, Mass., Free Public Library		1
Worcester Academy, <i>Worcester, Mass.</i>		1
Wright, Isaac A., <i>Kansas City, Mo.</i> 51 broadsides		
Wycliff Society, <i>London, England</i>	21	
Wyoming. Secretary of State, <i>Cheyenne</i>	1	2
Wyoming Agricultural Experiment Station, <i>Laramie, Wyo.</i>	1	2
Yale University, <i>New Haven, Conn.</i>	3	2
— Library	2	
— Observatory		1
Yarmouth Herald, Publishers of, <i>Yarmouth, Nova Scotia</i>	1	
Yearly Meeting of Friends, <i>Philadelphia, Pa.</i>		1
Yersin, Misses M. and J., <i>New York City</i>	1	
Yoneyama, U., <i>Tokio, Japan</i>	1	
Young, Prof. C. Howard, <i>Hartford, Conn.</i>	1	
Young Men's Christian Associations of North America, International Committee, Trustees of, <i>New York City</i> , ...	1	1
Young Men's Christian Association of the City of New York		1
Zaborowski, Dr. S., <i>Paris, France</i>	1	
Zaehnsdorf, Joseph W., <i>London, England</i>	1	
Zoological Society of Tokio, <i>Tokio, Japan</i>		3
Zürich, Switzerland, Stadtbibliothek		1
	478	576

APPENDIX XIV.

ORDERS OF THE CITY COUNCIL AND MEMORANDUM
OF PETITIONS, ETC.

The following are the orders passed by the City Government during the year ending January 31, 1899, which have been communicated to the Trustees as affecting the Library Department:

CITY OF BOSTON,
IN BOARD OF ALDERMEN, March 7, 1898.

Ordered, That the Trustees of the Public Library be requested to include in their estimates of appropriation for the Library Department for the current year the sum of fifteen hundred (1,500) dollars for the purpose of establishing a reading-room and delivery station of the Public Library, in the vicinity of the junction of Hampden and Dudley streets, Roxbury.

Passed. Sent down for concurrence. March 10 came up concurred.

A true copy.

Attest:

(Signed)

JOHN T. PRIEST,
Assistant City Clerk.

CITY OF BOSTON,
IN COMMON COUNCIL, March 24, 1898.

Ordered, That the Trustees of the Public Library be authorized to draw from the city treasury the sum of fifteen hundred (1,500) dollars to be placed in the hands of the Library Auditor for meeting petty current expenses, to be accounted for before the close of the fiscal year; the same to be charged to the appropriation for the Library Department.

Passed. Sent up for concurrence.

IN BOARD OF ALDERMEN, March 28.

Concurred. Approved by the Mayor, March 31, 1898.

A true copy.

Attest:

(Signed)

JOHN T. PRIEST,
Assistant City Clerk.

CITY OF BOSTON,
IN COMMON COUNCIL, May 19, 1898.

Ordered, That the Trustees of the Public Library, through His Honor the Mayor, be requested to erect a flag-staff and fly a flag therefrom, in front of the Central Library Building; the expense of the same to be charged to Library Appropriation.

Passed. Sent up for concurrence.

IN BOARD OF ALDERMEN, May 23.

Concurred.

The foregoing order was presented to the Mayor, May 24, 1898, and was not returned by him within ten days thereafter.

A true copy.

Attest:

(Signed)

JOHN T. PRIEST,
Assistant City Clerk.

The following reply of the Librarian, dated June 9, 1898, was approved by the Trustees June 10, 1898:

June 9, 1898.

HON. JOSIAH QUINCY,

Mayor:

DEAR SIR,—In behalf of the Trustees I beg to acknowledge the receipt of a copy of an order of the City Council as follows:
(Order as above.)

With reference to the above I beg to state that there is already, and has been for some time past, a flag-staff *projecting* in front of the Library building; and that a flag has been displayed thereon consecutively for weeks past, and was so displayed at the time the above order was introduced.

Very respectfully,

(Signed)

HERBERT PUTNAM,
Librarian.

CITY OF BOSTON,
IN COMMON COUNCIL, December 29, 1898.

Ordered, That the Trustees of the Public Library be requested, through His Honor the Mayor, to submit to the Board of Apportionment in their annual estimates, an additional sum of two thousand (2,000) dollars, to be expended for the establishment

of a reading-room in the vicinity of Andrew square, South Boston.

Passed. Sent up for concurrence.

IN BOARD OF ALDERMEN, December 31.

Concurred.

A true copy.

Attest:

(Signed)

JOHN T. PRIEST,
Assistant City Clerk.

CITY OF BOSTON,
IN COMMON COUNCIL, January 26, 1899.

Ordered, That the Trustees of the Public Library, through His Honor the Mayor, be requested to establish a reading-room in Ward 13.

IN COMMON COUNCIL, January 26, 1899.

Referred to His Honor the Mayor.

(Signed)

DANIEL J. KILEY,
President.

CITY OF BOSTON,
IN COMMON COUNCIL, January 26, 1899.

Ordered, That the Trustees of the Public Library be requested and authorized, through His Honor the Mayor, to establish a Public Reading-room in the building formerly the pumping station, and now used for ward-room purposes, on Elmwood street, Roxbury.

FREDERICK W. KLEMM, Ward 21.

IN COMMON COUNCIL, January 26, 1899.

Referred to His Honor the Mayor.

(Signed)

DANIEL J. KILEY,
President.

MEMORANDA.

Two petitions were received during the year, one from residents praying for a Branch Library at Grove Hall, one from District 13 Conference of the Associated Charities, for a Reading-room

and Delivery Station in Ward 17. In addition, communications have been received from seven private sources recommending the establishment of stations in several sections of the city.

From time to time question has been raised as to the proper form of a gift or bequest for the benefit of the Library. The following form is therefore appended. The Trustees are a corporation, and are entitled to receive and hold bequests. Gifts or bequests to the city for the benefit of the Library would of course be equally applied to its uses :

FORM OF BEQUEST.

I give and bequeath unto The Trustees of the Public Library of the City of Boston, a corporation created by and existing under the laws of the State of Massachusetts, the sum of dollars, to be applied for the benefit of the Public Library of the City of Boston.



ANNUAL REPORT
OF THE
MARKET DEPARTMENT
FOR THE YEAR 1898.

CITY OF BOSTON,
OFFICE OF SUPERINTENDENT OF MARKETS,
April 20, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

DEAR SIR, — In conformity to chapter 3, section 22, of the Revised Ordinances, I herewith submit the annual report of the Department of Markets for the year ending January 31, 1899.

The portion of the buildings used for market purposes are generally in good condition, and will need only the ordinary repairs that the city is required to make, with the exception of that portion in the basement which is used for sanitary purposes. The closets and appurtenances connected with this part of the building are in very bad condition, and should be replaced with new and modern conveniences. Those now in use have been there for several years and are constantly out of repair, causing considerable expense and requiring them to be closed, sometimes for one or two days. As there are from twelve to fifteen hundred occupants of the market who have the privilege of using the apartments, any repairs which are required are the cause of great inconvenience to a large number of people. They are intended only for the use of the occupants of the Market, but it is found impossible to confine

them to this use. Should such changes as ought to be made be consummated, a proper person should be placed in charge, to keep them in a clean and neat condition, and would answer all the purpose of a public sanitary in this section, and be a saving in the expense which would be incurred by establishing a new place for the same purpose.

The work of reconstructing Faneuil Hall is progressing slowly, owing to delay in obtaining some of the material required. While the work has occasioned considerable annoyance to the lessees they have been enabled to continue their business without much interruption, and feel that when the work shall be completed they will be relieved from many annoyances they have experienced in the past, and feel more secure in their holdings. The outside vestibule doors leading to the market in this building should be made new, to be in keeping with the rest of the building when completed.

In addition to the repairs and changes in the stalls and cellars which are made by the lessees at their own expense, they have also had placed on the roof of the buildings snow-guards as a protection from slides, which have been a great annoyance to pedestrians as well as considerable expense to the city. The expense for this work amounting to about five hundred (500) dollars, was paid by the lessees, with the exception of one hundred and twenty-three (123) dollars which the Market Department assumed as a part of the expense to be paid by the city. The iron frame awnings which were erected around Faneuil Hall Market about a year ago have given perfect satisfaction, and have been a great improvement to the appearance of the building, as well as a benefit to the lessees and the public generally. When new awnings are placed around the Faneuil Hall building I would suggest that the same principle be carried out, as by so doing, the unsightly appearance of dirty and ragged awnings is removed, and better light is provided for those doing business inside the market house.

The streets surrounding the market houses are in very bad condition on account of the constant digging up which has taken place for several years in repairs and renewing of gas, water, electric and cold storage pipes, as well as new sewers which have been laid in North and South Market streets. These improvements have been made in such a thorough manner that the streets ought not to be disturbed for several years, and a new and improved pavement such as was laid on Commercial street a few months since would be of great benefit to the immense amount of teaming traffic which occurs in this part of the city.

During the year the police detailed for duty at the market have made eighty-six arrests as follows: Larceny, twenty-three; drunkenness, thirty-eight; obstructing the streets, two; cruelty to animals, five; assault and battery, eleven; driving glandered horses, two; embezzlement, using obscene language, obtaining money under false pretences, and creating a disturbance in the market, one each, five; making in all eighty-six arrests.

During the year I have condemned and ordered to be destroyed as unfit to be used for food, 783 pounds poultry; 232 pounds veal; one barrel and two carcasses of venison; 283 pounds fish; ten barrels cucumbers, besides large quantities of fruit and vegetables which have been sent to the dumping scow.

I would suggest that some arrangement might be made whereby when larger quantities of this refuse matter accumulates than the Sanitary Department feel justified in removing at the expense of the city that dealers be permitted to deliver it at the dumping scow free of expense. They are now required to pay for the carting, and also a fee for depositing in the scow.

The income from the Department of Markets for the year ending January 31, 1899, has been as follows:

From rents from stalls and cellars in Faneuil Hall Market	\$65,364 00
From rents from stalls and cellars in new Faneuil Hall Market	18,228 00
From rents from outside stands, Faneuil Hall Market	1,407 00
From weighing fees at city scales, Faneuil Hall Market	549 38
Total income	<u>\$85,548 38</u>

The appropriation for the Market Department for the year ending January 31, 1899, was \$8,200.00. An additional appropriation of \$413.12 was required to provide for work which unexpectedly was obliged to be done, making the total expense for the department \$8,613.12, and this was expended as follows:

Salary of Superintendent of Markets	\$3,000 00
Salary of Deputy Superintendent and Weigher at City Scales	1,500 00
Salary of one watchman	1,100 00
Carried forward	<u>\$5,600 00</u>

<i>Brought forward</i>	\$5,600 00
Salary of one messenger	1,000 00
Amount paid for extra police during vacations and holidays	175 42
Amount paid for gas and electric light	1,092 52
Amount paid for miscellaneous supplies	745 18
Total expense	<u>\$8,618 12</u>

The property in the department belonging to the city is :

Electric light wiring in Faneuil Hall and new Faneuil Hall Market cost	\$1,672 00
One Morse safe	150 00
One Howard watch clock	200 00
One Howard watch clock	50 00
Two roll-top desks and one roll case	125 00
Two clothes presses	30 00
Scales, weights, etc.	125 00
Bookcase, stoves, carpets, chairs and small supplies	100 00
Total	<u>\$2,452 00</u>

Respectfully submitted,

GEORGE E. MCKAY,
Superintendent.



ANNUAL REPORT
OF THE
MUSIC DEPARTMENT
FOR THE YEAR 1898-99.

DEPARTMENT OF MUSIC,
OFFICE OF THE COMMISSIONERS, May 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston:

SIR,—In accordance with chapter 3, Section 22, of the Revised Ordinances, the Board of Music Commissioners respectfully presents its first annual report.

This Board was created by a city ordinance passed April 23, 1898. The ordinance is as follows:

“Be it ordained by the City Council of Boston, as follows:
A Department of Public Music is hereby established, to be in charge of a board of five members, who shall be appointed by the Mayor, and shall serve without pay. The members of said Board may be appointed by the Mayor at any time after the date of the passage of this ordinance, subject to confirmation by the Board of Aldermen, to serve until the first day of May next. On or before said first day of May, eighteen hundred and ninety-eight, the Mayor shall appoint, subject to confirmation by the Board of Aldermen, one member to serve for the term of five years, one for the term of four years, one for the term of three years, one for the term of two years and one for the term of one year; each term beginning with the first day of

May; and annually after the current year, one such member shall be appointed as aforesaid for the term of five years, beginning with the first day of May in the year of appointment. Said Board shall have the charge and control of the selection of the public music to be given either indoors or in the open air, for parades, concerts, public celebrations and other purposes, under authority of the City Council, except entertainments for children on the Fourth of July; shall determine the parties to furnish the same, and shall make all contracts and expend all moneys to be paid from the City Treasury for such music."

APPOINTMENTS.

The present members of the Board were appointed May 9, 1898, to serve respectively as follows: Carl Zerrahn, five years; John A. O'Shea, four years; J. Thomas Baldwin, three years; James M. McLaughlin, two years; Alfred P. DeVoto, one year.

ORGANIZATION.

The Board organized May 21, 1898, and the following officers were chosen: Carl Zerrahn, Chairman; John A. O'Shea, Vice-Chairman; J. Thomas Baldwin, Secretary.

OBJECT OF THE MUSIC DEPARTMENT.

The chief object of the Commission is to present to the public a high standard of popular music, thus developing among the people a taste for the better forms of classical music, and eventually to place music under the patronage of the city government on an equal footing with what this city has done for the people in the sister arts of painting, sculpture, architecture and literature, as shown in the maintenance of our Public Library, with its immense manifold advantages for the growth of popular education and refinement.

"The French," says Fétis, "owe the superiority of their lyrical dramas and orchestra to the excellence of their national schools, and not to any natural capacity to excel in the musical art.

"The Italians have easy access to operas, and live in the midst of song. The Germans have had for three centuries the advantages of musical education, in cities, towns and villages; hence the number of eminent composers and performers produced in that country, and its just claim to the

distinction it enjoys of being the most musical nation in Europe."

John Ella, founder and director of the Musical Union, London, in 1866, communicated to the English people among other things this sentiment:

"The artistic and æsthetic experiences derived from frequent travels on the Continent, compel me to admit that so long as my country is without that governmental support which furnishes an economic basis for cheap classical performances, such as I have alluded to in Vienna, under the direction of learned and experienced kapellmeisters, music in England will ever remain as it is now, a trade. In France it is an art, in Italy a necessity, and in Germany a religion."

The governmental support given in Germany, Italy and France, is the chief reason why these countries lead the world in music.

The creation of the Music Department of the city of Boston, therefore, has given a foothold in this country to that principle of governmental support which must be recognized as a prime factor, if this country is to take a place in the front ranks in matters musical.

BAND CONCERTS.

Recognizing how important a factor a good band is in establishing a taste for the best music, and deploring the fact that poorly rehearsed bands of meagre size were becoming the rule, the Commissioners naturally first turned their attention to the formation of a band, which would consist of the best available talent, well drilled, and complete as to instruments. Accordingly the Municipal Band, consisting of thirty-seven pieces, under the directorship of Mr. E. A. Catlin, was organized on May 21, 1898. Fourteen band concerts were given on successive Sunday afternoons, beginning June 19, 1898, on Boston Common; eleven concerts were given at Marine Park, South Boston, on successive Sunday evenings, beginning June 19, 1898; eight concerts were given at various times in the following sections of the city: North End, East Boston, Charlestown, Brighton, Dorchester and Jamaica Plain.

All of these concerts were attended by unprecedented crowds, the attendance increasing as the season progressed. By the provision of some 6,000 seats on the Common for the accommodation of those attending the concerts there, and also by the distribution of programs, and supplying drinking

water through the services of messenger boys, the material comfort of the audiences was greatly increased over former years, and helped to make the city concerts of 1898 more popular and enjoyable. Musically, the Commissioners feel justified in saying that the performances of the band, both in the music selected and the manner of its rendition, were superior to any given under city auspices in previous years. The experiment of adding vocal solos, and occasionally a mixed chorus, at the concerts on the Common, was a feature entirely new, and one which, with adequate resources, might be developed with much more satisfactory results.

A serenade band, consisting of twelve performers on brass instruments, gave a series of concerts on Boston Common, and at Franklin and Wood Island Parks. It showed the musical possibilities of a small band when formed of competent men playing well-arranged selections. It also proved that a band of this size might be utilized to draw the attention of the people to places in the city's beautiful park system, whose attractions have not as yet become well enough known to the people at large.

STRING QUARTET CONCERTS.

String quartet concerts were deemed by the Commission to be one of the best ways of educating the people to the higher forms of music. In accordance with this view the Municipal String Quartet was formed in November, 1898, consisting of well-trained musicians, and by them a series of twenty-two chamber concerts was given in various sections of the city. Beginning with a concert on November 15, in Lyceum Hall, East Boston, the quartet, assisted by a vocalist and pianist, were heard weekly in a program selected from the works of the masters in the following sections of the city: Two concerts in East Boston, Charlestown, South Boston, Roxbury, Old Public Library, Jamaica Plain, North End and Brighton, and one concert in Dorchester, Mt. Pleasant, South End ward-room, Warren-street district, Neponset and Boylston Station.

In December, 1898, at your request, the School Board kindly voted to allow the use of the school halls for these concerts. This was a great help to the Commission, financially, as it removed the necessity of paying rent for halls, also enabled the musicians to give their concerts in places well adapted to this style of concert. It was also of advantage in other respects, the central location of the school halls in all the districts affording the people an opportunity to

hear this music in their immediate neighborhood. Fully 15,000 people availed themselves of the privilege afforded by these concerts during the winter, and the attention with which the carefully selected music was followed and the appreciation it received was most gratifying.

MECHANICS HALL ORGAN.

The large three-manual organ of the Charitable Mechanics Institute Building on Huntington avenue being offered for sale at a great sacrifice, it was voted at the meeting held June 29, 1898, to purchase the same. The Commissioners hoped to encourage and popularize organ music by means of this instrument, by giving in Mechanics Hall a series of organ concerts during the winter season; but they regret that as yet their appropriation is not ample enough to put this plan into effect. In this connection it is well to note that in England nearly all the larger cities own organs (generally the best instruments), and free organ concerts are given to the people during the year. The Commissioners feel that it would be very desirable if the city of Boston could be on a par with other cities in this respect.

ORCHESTRAL CONCERTS.

Realizing the value to the people of popular orchestral concerts of the lighter classics, the Commissioners wished to give a series of such concerts during the winter season, charging a nominal fee for admission. Consulting the Corporation Counsel, it was found impossible to give these concerts under the auspices of the Commissioners as city officials, because of the admission fee charged. They however found it possible to do so, as individuals, by the personal guarantee of Your Honor, and by the generous contribution of \$500 towards the expenses of the series by Mr. B. F. Keith of this city. The prices of admission ranged from 10 to 25 cents, and twelve concerts were given by an orchestra of thirty-five members, conducted by Mr. John C. Mullaly and Mr. Emil Mollenhauer, each of whom conducted six concerts. These concerts, from an artistic standpoint, were a most gratifying success. They marked an epoch in the history of music in our city, and if they could become a permanent feature of our winter season they could be made an important factor in the musical development of our people. Their inception, even under the disadvantages spoken of, was a step in the right direction, and an effort should be made to have legislation passed, whereby the

Commissioners, as the Music Trustees of the city, could have the legal power to give concerts where a nominal fee might be charged, especially since the object of these concerts is solely for the good of the public, the net proceeds, if any, to be donated to one or the other of our city charities.

SECRETARY.

The success of the work of the Commission involving a considerable amount of detail work, it was found necessary to engage the services of a secretary to attend to the clerical work and act as the executive officer of the department. Consequently, at a meeting held September 30, 1898, Mr. M. J. Dwyer was by vote appointed secretary of the department, at a salary of \$1,600 per annum, his term beginning October 15, 1898.

ITINERANT PLAYERS ON MUSICAL INSTRUMENTS.

For the purpose of exercising a censorship on the music played on the streets of the city by licensed players on street instruments, an arrangement was made with the Board of Police, whereby all street players on musical instruments would be required to pass an examination before the Board of Commissioners twice a year. The essential qualification fixed by the Board for a license was that such instruments as hand organs, street pianos and the like, should be kept by the owners in perfect tune; and in the case of stringed instruments and others the performers should be required to play fairly well, and possess a good instrument. The district where restrictions existed on the performance of any street music was extended, and it having been found that the instruments known as "Organettes" were largely used as an accompaniment to street begging, these instruments were debarred altogether from obtaining license. An officer was delegated by the Board of Police to see that the new rules of the Commissioners were strictly carried out, and the good results of this departure are already apparent in the class of instruments and kind of music now heard on the city streets.

EXPENSES.

The expenses of the department up to the end of the financial year January 31, 1899, were \$9,046.37, divided as follows:

Salaries of the Municipal Band	\$5,482 00
Soloists and accompanists	371 00
Attendants at concerts, clerical help, stenographer, etc.	1,187 22
Use of piano at rehearsals, etc.	62 50
Rent for hall for chamber concert	26 00
Services of other bands, and sheet music	248 62
Uniforms for Municipal Band	134 96
Teaming of bandstands and seats	129 25
Repairing of chairs, Boston Common, and stands	306 84
Printing	659 95
Stationery	56 68
Messenger boy services, dispensing water at concerts on the Common	111 81
Furniture for office, telephone service, etc.	269 54
	\$9,046 37

GENERAL REMARKS.

In reviewing the year's work, the Commissioners feel that a decided advancement has been made towards creating a musical atmosphere, which is needed in Boston not only as a means of encouraging among the masses of the people a taste for the best class of music, but also as a help to the development of their natural aptitude for creative, as well as executive, ability in the art of music. To make it possible to hear good music, well performed, commonly and often, constitutes the first and most important requisite for the creation of a musical atmosphere. This the Commissioners have tried to do with the small amount of funds at their disposal, by giving the best music, well performed, and by taking it to the very doors, almost, of the people. With a more generous appropriation for the purposes they have in mind, it would be possible to do far more than has been done in the direction of making our city take the lead in giving to the people the opportunity to enjoy throughout the year, under the patronage of the city, the presentation of the best forms of music. Good music in America has been too long kept away from all but a select few. Our Symphony concerts, operas and chamber concerts, are practically barred from the people at large on account of the high charge for admission to them. The work of the Commission is well adapted to bring to the masses of the people much of the enjoyment hitherto restricted to people of means; and if for no other purpose than to combat the depraved artistic taste which is being rapidly developed among the people by the influence of trashy music and the so-called popular song, the Commission would be of value. Aided by the generous and cordial support of the

city government in the provision of an adequate amount of money to carry out their ideas, the Commission could do a great and desirable public work in our city in influencing for good the music heard in our various places of entertainment, and also that which is played and sung in our homes.

Respectfully submitted for the Commission,

JOHN A. O'SHEA,
Vice-Chairman.



ANNUAL REPORT
OF THE
OVERSEEING OF THE POOR DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1899.

BOSTON, February 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston:

SIR,— The Board of Overseers of the Poor herewith present their thirty-fifth annual report of the present series, covering the year from February 1, 1898, to January 31, 1899.

EXPENSES OF THE DEPARTMENT.

Our drafts upon the city treasury during the	
year ending January 31, 1899, amounted to .	\$132,042 23
Sundry receipts paid over to City Collector .	17,199 61

Leaving the net charge to the city for the de-	
partment for the year	\$114,842 62

Amount collected by us for care in City Hospi-	
tal of State paupers, and those belonging	
elsewhere than in Boston, and paid over to	
the trustees of the City Hospital	\$78,667 69

STATISTICS OF CASES AIDED.

The number of families assisted by us in the year was 3,394, a decrease of 4 families from the previous year. Of these, 358 families resided in other cities and towns, but had retained their settlement in this city; and we received payment for aid rendered to 239 families residing in Boston, whose legal settlement was elsewhere.

The number of new cases aided during the year was 842, an increase of 10 over the year previous. The total number of cases dealt with since 1864 is 34,706.

The number of official visits made by our visitors during the year was 21,016.

FAMILIES AIDED DURING THE YEAR ENDING JANUARY
31, 1899.

1,850 having settlements here, aided directly from this office, or by agents in the outlying districts.

358 having settlements here, aided in other cities and towns, through the overseers of the poor of those places.

367 families, of which the man is unsettled, the wife and children having a settlement here.

239 residing here, having settlements in other cities and towns, which refund amount of relief granted.

450 unsettled cases aided on account of the State.

130 non-settlement cases, temporarily aided.

3,394 families, representing about 10,182 persons.

NUMBER OF FAMILIES AIDED IN EACH MONTH OF THE
PAST TWO YEARS.

1897. Feb.,	1,761 families.	1898. Feb.,	1,783 families.
March,	1,716	March,	1,615
April,	1,242	April,	1,307
May,	1,107	May,	1,180
June,	1,030	June,	1,161
July,	1,108	July,	1,177
Aug.,	1,027	Aug.,	1,140
Sept.,	1,084	Sept.,	1,162
Oct.,	1,098	Oct.,	1,194
Nov.,	1,190	Nov.,	1,214
Dec.,	1,568	Dec.,	1,615
1898. Jan.,	1,796	1899. Jan.,	1,740

DISTRICTS.	Number of Families aided.	Amount of Aid given.	Population by Census of 1890.
East Boston	168	\$3,417 27	36,930
Charlestown	427	8,396 70	38,348
City Proper	1,048	21,950 79	149,449
South Boston	458	10,821 74	66,791
Roxbury	688	20,366 10	90,292
Dorchester	70	2,878 95	29,638
West Roxbury	70	3,086 63	24,997
Brighton	80	1,982 41	12,032
Living out of city but aided from this office	27	1,434 83	
Living out of city and aided through officers of other cities and towns	358	11,339 36	
Totals	3,394	\$85,674 78	448,477

To the sum of \$85,674.78, given directly to the poor, should be added the sum of \$3,600.98, paid for burials, the sum of \$6,133.42 paid for support of the Temporary Home, and the further sum of \$7,917.86 paid for support of the Lodge for Wayfarers ; making a total of \$103,327.04 actually paid out by the Overseers of the Poor from the tax levy for the direct relief of the poor. We have also disbursed as trustees the further sum of \$29,633.29 to the various pensioners and beneficiaries adjudged worthy and falling within the provisions of the trusts.

THE WORK TEST.

The Board has continued to demand work of all able-bodied male applicants in return for groceries and coal furnished their families.

	1896.	1897.	1898.
Number of men who worked for aid given	525	593	562
Number of days' work actually performed	3,395	4,604	4,521
Number of men receiving work-cards who did not present them for work	108	102	113

STATISTICS OF THE WAYFARERS' LODGE.

	1897.	1898.
Total number of meals furnished during the year	54,420	53,214
Total number of lodgers during the year, ...	21,772	22,353

The birthplaces of these lodgers were as follows:

America	10,901	11,718
Ireland	5,850	6,373
England	1,453	1,322
British Provinces	1,404	1,317
Scotland	777	566
Other countries	1,387	1,057
	21,772	22,353

Meals.	1897.	1898.	Lodgers.	1897.	1898.
February	5,396	4,663	February	2,096	1,545
March	6,419	5,037	March	2,492	2,090
April	5,398	4,785	April	2,609	2,392
May	4,373	4,664	May	1,937	2,154
June	4,052	4,128	June	1,682	1,722
July	3,525	4,077	July	1,354	1,546
August	3,430	3,825	August	1,310	1,228
September	3,358	3,366	September	1,328	1,261
October	3,994	3,850	October	1,666	1,815
November	3,879	4,137	November	1,614	2,009
December	4,765	5,085	December	1,863	2,425
January	5,831	5,597	January	1,821	2,166

Number of tramps cared for over night—

In 1893 was	33,416
“ 1894 “	32,815
“ 1895 “	24,408
“ 1896 “	21,240
“ 1897 “	21,772
“ 1898 “	22,353

TEMPORARY HOME FOR WOMEN AND CHILDREN.

Record of Women Admitted to the Home in 1898.

	473 new cases, or women who had not been in Home pre- vious to 1898.		507 old cases, or women who had been in Home previous to 1898.					Totals.
	Came once only.	Came more than once.	Came in 1897, 1898.	Came in 1896, 1897, 1898.	Came in 1895, 1896, 1897, 1898.	Came in 1894, 1895, 1896, 1897, 1898.	Came oc- casional- ly in previous years.	
Known to have been in prison and alms- house	Record not known.	1	2	7	6	31	35	82
Known to have been in prison only.....		5	3	4	2	13	40	67
Known to have been in almshouse only....		14	22	11	6	28	75	156
Not known to have been in prison or almshouse		33	40	18	5	18	141	255
Totals.....	420	53	67	40	19	90	291	980

114 places secured at domestic service by Ind. Aid Soc.

158 places secured at domestic service by Home.

742 women admitted once only, or 742 times.

238 women admitted 646 times.

980

Record of Children Admitted to the Home in 1898.

726 children admitted 726 times.

Of whom 281 came with mothers.

“ “ 33 were lost children.

“ “ 21 were foundlings.

“ “ 114 came in various ways.

“ “ 196 were sent by the State.

“ “ 81 by Society for Prevention of Cruelty
to Children.

Record of Outside Relief.

2,224 meals given to 1,091 women (321 of whom had been inmates) and 86 children.

7 of these women had over 25 meals each.

28 “ “ “ “ from 10 to 25 meals each.

1,056 “ “ “ “ “ 1 to 10 “ “

Nine hundred and eighty women have passed through the Home this year. They are the same mixed group of wayfarers : women beaten and pushed hither and thither by force of circumstances or by temptations too hard to resist.

Among the women there are always some younger and less confirmed in their habits, for whom much can be done, and to help whom is the great problem at which we are constantly working. To be just and discriminating and to give every one a fair chance is therefore the aim we keep before us.

We give work in the Home to all who are able to perform it, increasing it for those who ought to find it elsewhere. We improve every opportunity to obtain work outside, through applications made at the Home, through the Industrial Aid Society, and through various private sources. We make every effort to provide for the children, and for those for whom any hopeful work can be done by co-operating with many societies and agencies, thus continuing the policy of last year as indicated by report for 1898.

The total number of individuals received into the Home has gradually decreased since 1893. This year shows eighty-five less than last.

We wish to point out also as a satisfactory gain, that the number of women who use the Home as a temporary shelter has increased, while the number of "Repeaters" has decreased.

The following cases will indicate the kind of work that has been done by the Matron of our Home during the past year :

A girl of eighteen, left alone and penniless on the Common at night by an uncle who went to take a drink, was brought to the Home by the policeman to whom she appealed in a terrible frightened condition. The uncle was found in the police court next day. At the end of a few days they went home together.

A runaway girl of eighteen from out of town had been in bad company for several days. After much effort friends were found who took her home.

Three sisters, twenty-one, seventeen and fourteen years, came for help. Excellent girls, father and mother dead, home broken up, had wandered over the city half the night. Placed the two younger in families and found situation for elder.

A young woman who was suffering from an attack of delirium tremens when brought to the Home, was afterwards returned to her family, who are rich, and who had been searching for her.

A young Russian girl, well dressed, brought from the Union Station late in the evening in great terror and distress and unable to make herself understood in English. Relatives were seen and Dr. Jelly consulted. She was placed in a hospital for mental trouble.

EXPENSES OF DEPARTMENT.

We are happy to record the fact that the amount of our drafts upon the City Treasury was less by \$1,856.26 than last year, and that the net cost of our department to the city was \$1,899.57 less. The amount collected by us for the care of State and town paupers in the City Hospital, and by us turned over to the Trustees of the City Hospital was \$78,667.69, as against the sum of \$43,428.46 collected and turned over to the City Hospital Trustees in the preceding year. This increase was partly due to the collection of many overdue bills.

WIDOWS WITH CHILDREN.

An effort was made during the winter to do special work in behalf of the numerous cases of widows with children applying to us for aid. A special committee was appointed, and a woman engaged for a short time to make investigation into such families, and endeavor to keep them from becoming permanent pauper cases. The experiment bade fair to be successful, but the illness of the temporary agent put a stop to the work as far as her individual efforts were concerned. The committee is still in existence, however, and is endeavoring to achieve the desired ends through the regular visitors. All new cases of widows with children are referred to this committee in the first instance, in the hope that they can give them more time and attention than it is possible for the larger committee to devote to such cases.

CHARLESTOWN'S SICK POOR.

A change in the care of the sick poor in Charlestown was instituted last fall. The salary of Dr. Sprague, who has faithfully served the Board for many years as its physician in that district, was discontinued. The arrangement now in force provides for the calling in a physician (preferably Dr. Sprague) to attend the wants of any sick under our charge, by the overseer or visitor in the district, after due investigation.

This new departure has worked well the past winter, and will, we think, greatly reduce the expenses of the medical department of our work, and ultimately tend to decrease the number of paupers in our charge.

The Board felt that the abolishing of the office of city physician would result in a diminution in the number of applicants for sick relief, and such would seem to be the case. At the same time it was felt that all suffering cases would be amply cared for by the overseer and the visitor upon application made to them. The general hospitals and dispensaries take care of many of the needy cases, often giving better care than they could possibly obtain in their homes. A longer trial of the new system will enable us to speak more confidently of its merits.

THE SPANISH WAR.

At a conference in May last, held with the Mayor and representatives of the various departments having charge of the in-door poor and criminals, we made arrangements to receive a large number of the paupers from Long Island in our Temporary Home and Wayfarers' Lodge, in case of their removal on account of threatened bombardment by the Spanish. We were to have taken the women and children, and to have discontinued the regular work of the Lodge for the time being for that purpose.

INCOME OF THE MASON FUND.

A special committee considered the disposition of the income of the fund left to us by Jonathan Mason in 1798, interest to be paid annually, "to the standing chaplain of the almshouse and workhouse, or by whatever other name called." The following vote was passed by the Board:

"*Voted*, That the income of the Mason fund be divided into four equal parts, one of said parts to be paid over to Rev. William B. Toulmin in his capacity as Chaplain of the Almshouse, and one of said parts to be paid to said Rev. William B. Toulmin as Chaplain of the House of Correction at Deer Island, formerly the workhouse. Also that one of said parts be paid to Rev. P. H. Brennan in his capacity as Chaplain of the Almshouse, and one of said parts be paid to Rev. P. H. Brennan as Chaplain of the House of Correction at Deer Island."

DEATH OF TREASURER LINCOLN.

Hon. Frederic W. Lincoln, ex-Mayor of Boston, who was Chairman of this Board from June, 1867, to April, 1878, died on the thirteenth day of September, 1898, after more than twenty years' service as our Treasurer. He was elected

Treasurer soon after resigning from the Board, and was in active performance of his duties at the time of his death.

The Board met in special session and voted to attend his funeral in a body, and also passed appropriate resolutions to his memory, extolling his worth and long services, and expressing their sympathy with his family.

ELECTION OF TREASURER.

In November, 1898, the Board selected as its Treasurer Mr. Richard C. Humphreys, a member of the Board from May, 1890, to September, 1898. During his connection with us he served on many important committees, and the Board were glad to be able to resume official relations with him.

DEATH OF ENGINEER.

Mr. Martin J. Connolly, who had for more than thirteen years been the engineer in charge of the steam-heating for the Charity Building and the Temporary Home, died of consumption November 24, 1898. He was a faithful, conscientious man, and leaves behind him a record of long and honorable service.

PROMOTION OF ANATOMICAL SCIENCE.

The Legislature of 1898 passed a law for the above-named purpose, a copy of which is printed in the appendix of this report. By its provisions our Board and other similar boards and trustees are obliged to allow medical schools to take the dead bodies of certain persons in our charge to be used by such schools for the purposes of dissection. We have spent much time with the representatives of the medical schools, arranging details, and feel that we have provided in every possible way for respecting the wishes of any friends of the deceased in regard to the interment of bodies placed in our charge for burial.

AMENDMENTS TO THE PAUPER LAWS.

Chapter 425 of the Acts of 1898, a copy of which will be found in the appendix to this report, makes important changes in the pauper laws of the State. The main provisions are:

Settlements not fully gained since May 1, 1860, are by this act defeated and lost, except where an existing settlement prevented the acquisition of a subsequent one.

Absence from the State for ten years defeats a settlement previously acquired.

Mothers are made legally liable for the support of their children.

TRUST FUNDS.

The total amount of the trust funds in our charge as a corporation is now \$720,061.56.

The number of pensioners now aided from the Pemberton, the Boylston Relief, the David Sears Charity, the Moses Hunt, and the Goodnow funds, is 281, ten less than on February 1, 1898. During the year, nineteen have died, one has gone to the Old Ladies' Home, four have become self-supporting, one has gone to the almshouse, one has left the State, one has become settled elsewhere, two have been transferred to State Aid Department, and five have been transferred to the city list. Twenty-four new names have been added.

We have paid during the year from the Boylston Education Fund \$5,558.61, for the board of children, conformably to the terms of that trust.

For details of the various funds held by us, and receipts and expenditures since February 1, 1898, see the tabulated statement herewith submitted. Extracts from the wills establishing these trusts will also be found at the end of this report.

DECREASED INCOME FROM TRUST FUNDS.

Owing to the fact that the larger portion of our trust funds are invested in city of Boston notes, and to the lower rate of interest now paid by the city, the income from our trust funds is constantly diminishing. We have been obliged to reduce the number of our pensioners on this account; and as time goes on, and our outstanding notes fall due, and are renewed at constantly diminishing rates, it will be necessary for us to still further lessen the number of our beneficiaries.

FINANCIAL STATISTICS.

Reports of the secretary and treasurer are herewith submitted. They show all receipts and expenditures during the last twelve months, so arranged that the expenses of the several branches of our work can be readily ascertained. A schedule of the personal property in our hands February 1, 1899, is also annexed.

Respectfully submitted,

In behalf of the Overseers of the Poor,

WILLIAM P. FOWLER,

Chairman.

NOTE. — In accordance with the practice of recent years, we had an expert accountant examine the books and accounts of the Board at the close of the financial year. His report is appended at foot of page 14.

FINANCIAL REPORT.

Statement of receipts and expenditures for the year ending January 31, 1899:

RECEIPTS.

Cash on hand February 1, 1898,	\$3,173 30	
Drafts on City Treasurer, and requisitions for Temporary Home and Wayfarers' Lodge,	132,042 23	
Cash from cities and towns .	7,034 28	
Cash from occupants of Charity Building, for heating . . .	1,087 97	
Cash from Commonwealth, for relief	6,091 22	
Cash from State and other sources, for burials . . .	2,347 26	
Aid returned by paupers . . .	84 51	
Cash from sundry persons, for board in Temporary Home .	252 57	
Receipts on account of aid in City Hospital:		
Cities and towns, \$9,801 42		
State of Massa- chusetts . . . 68,831 27		
		78,632 69
Receipts from State of Massa- chusetts, for account of Car- ney Hospital cases . . .	2,213 57	
Receipts from sale of old barrels, etc., by the Supply Depart- ment	316 30	
Receipts from sale of junk .	50	
		\$233,276 40

EXPENDITURES.

Amount paid for burials . . .	\$3,600 98	
Amount paid cities and towns, for relief of Boston poor . . .	11,339 36	
Amount paid expenses Tempo- rary Home	6,133 42	
Amount paid expenses Lodge for Wayfarers	7,917 86	
Amount paid pensions and grants at office	22,103 87	
Amount cash paid for immediate relief of persons having no settlement	670 10	
Amount paid for fuel (1,318½ tons coal and 33 cords and ½ foot of wood)	8,529 34	
Amount paid for groceries and expense of delivery	38,505 22	
Amount paid salaries of treas- urer and secretary	4,313 89	
Amount paid salaries of book- keeper and clerks	5,302 00	
Amount paid salaries of visitors and agents	13,132 67	
Amount paid office expenses	1,189 62	
Amount paid transportation	863 15	
Amount paid Charity Building expenses	\$5,732 89	
Extra for plumbing, ...	623 60	
Extra for repairs on roof and boilers	663 46	
		7,019 95
Amount paid medical attend- ance and medicine	1,137 60	
Cash paid City Hospital	78,667 69	
Cash paid City Collector	17,199 61	
Cash paid Carney Hospital, as received from Commonwealth, ...	2,213 57	
Cash balance, January 31, 1899, ...	3,436 50	
		\$233,276 40

PAYMENTS TO THE CITY COLLECTOR DURING THE YEAR.

Receipts from occupants of Charity Building for heating during the year	\$1,087 97
Receipts from cities and towns	7,019 28

Carried forward,

\$8,107 25

<i>Brought forward,</i>	\$8,107 25
Receipts from the State for burials	1,937 07
Receipts from the State for relief of sick and wife-settlement cases	2,856 15
Receipts from the State for temporary aid, ...	3,235 07
Receipts for sundry burials	410 19
Receipts from paupers, aid refunded by them, ...	84 51
Receipts for account Temporary Home, board of women and children	252 57
Receipts from sale of barrels by Supply Department	316 30
Receipts from sale of old junk at the Lodge, ...	50
	\$17,199 61

EXPENDITURES ON ACCOUNT OF LODGE FOR WAYFARERS.

Salaries	\$3,684 66
Groceries and provisions	2,420 51
Furnishing goods	136 64
Fuel, 95 tons coal, 10 cords wood	581 60
Gas	335 25
Repairs, etc.	274 92
Stationery and printing	64 91
Water-rates	284 40
Sundries	33 48
Medical attendance	3 00
Disinfectants	25 00
New radiators	73 49
	\$7,917 86

EXPENDITURES ON ACCOUNT OF CHARITY BUILDING.

Fuel, 300 tons coal	\$1,500 00
Engineer's salary, ...	1,779 45
Janitor's salary	996 84
Disinfectants	32 40
Gas \$47.88, and electric lighting \$232.14	280 02
Water-rates	86 80
Sundries	48 13
Extra labor in boiler-house and building	60 00
Repairs of roof, \$410.45, of boilers \$253.01	663 46
General repairs	245 42
Plumbing	623 60
Cleaning	387 01

Carried forward,

\$6,703 13

<i>Brought forward,</i>		\$6,703 13
Painting		147 25
Furnishing		136 07
Flag and painting staff		33 50
		\$7,019 95
Deduct estimated cost of heating the Temporary Home, included in the above	\$1,506 33	
Also amount received from occupants	1,087 97	
		2,594 30
Net cost		
		\$4,425 65

EXPENDITURES FOR CITY TEMPORARY HOME.

Groceries, provisions, etc.	\$1,349 99
Salaries	2,123 66
Fuel, 15 tons coal, 3 cords wood	110 95
Gas and electric lighting	69 84
Water-rates	129 90
Medical attendance and medicine	23 01
Confinement cases	580 00
Furniture and household goods	113 26
Repairs	352 20
Sundries	86 25
Painting	691 00
New range, laundry stove, copper boiler and water back	439 96
Stationery	17 60
Telephone	20 80
Clearing out rats	25 00
	\$6,133 42

Estimated cost of heating, included in Charity Building expenditures	1,506 33
	\$7,639 75
Deduct receipts for board and medical relief of sundry persons	252 57
Net cost	
	\$7,387 18

BOSTON, March 22, 1899.

WILLIAM F. FOWLER, ESQ.,

Chairman, Overseers of the Poor:

SIR, This is to certify that I have made a careful examination of the books and accounts of the Overseers of the Poor, and those relating to the trust funds and income thereof, for the year ending January 31, 1899, and find them clear and correct.

All receipts of money were deposited in banks, all payments vouched, and the two sets of books exactly balance.

Faithfully,

GEO. T. STODDARD, Auditor.

Statement of Trust Funds in the Hands of the Overseers of the Poor, Richard C. Humphreys, Treasurer, January 31, 1899.

INVESTMENTS.	Pemberton or General Fund.	Boylston Education Fund.	Boylston Relief Fund.	Mason Fund.	Dexter Fund.	Jeffries Fund.	Lucy Bullman Charity.	David Sears Charity.	Pierce Fuel Fund.	Holton Protestant Pauper Fund.	Holton Protestant Poor Fund.	Stoughton Poor Fund.	Goodnow Fund.	Rachel T. Stevens Fund.	Moses Hunt Fund for the Destitute.	Total.		
United States four per cent. Treasury Bds.				6	\$7,300 00											\$7,300 00		
City of Boston Currency Notes.....	34	\$110,000 00 45	\$137,500 00 20	\$26,250 00 1	1,000 00	7	\$4,750 00 10	\$6,000 00 28	\$22,750 00 41	\$257,500 00 1	\$1,500 00 5	\$3,750 00 1	\$1,500 00 5	\$2,750 00 7	\$7,250 00 3	\$3,000 00 2	\$10,500 00	596,000 00
Fifty Associates' Corporation Stock.....								19	22,800 00								22,800 00	
Real Estate.....								48,066 32							2,200 00		50,266 32	
Columbian National Bank Stock.....		60	3,000 00														3,000 00	
New England " " ".....	50	5,000 00															5,000 00	
North " " ".....		72 00	168 00														240 00	
State " " ".....	60	6,000 00															6,000 00	
Tremont " " ".....	23	2,300 00 6	600 00														2,900 00	
Union " " ".....	32	3,200 00		28	2,800 00												6,000 00	
Washington " " ".....	60	6,000 00															6,000 00	
Swamscot Machine Company.....	9	450 00															450 00	
Investments.....		\$133,022 00	\$141,268 00	\$29,050 00	\$8,300 00	\$4,750 00	\$6,000 00	\$22,750 00	\$328,366 32	\$1,500 00	\$3,750 00	\$1,500 00	\$2,750 00	\$7,250 00	\$5,200 00	\$10,500 00	\$705,956 32	
Cash.....		2,480 58	7,310 87	1,392 68	542 46	595 75	746 20	539 36		45 93	611 83		200 62	578 61	82 61	634 28	14,105 24	
Cash Overdrawn.....									1,656 54									
Total.....		\$135,502 58	\$148,578 87	\$30,442 68	\$8,842 46	\$5,345 75	\$6,746 20	\$23,289 36	\$326,709 78	\$1,545 93	\$4,361 83	\$1,500 00	\$2,950 62	\$7,828 61	\$5,282 61	\$11,134 28	\$720,061 56	
Total, January 31, 1898.....																	716,860 47	
Increase.....																	\$3,201 09	

Boston, January 31, 1899.

RICHARD C. HUMPHREYS,
Treasurer.

TRUST FUND.—Cash Accounts, February 1, 1898, to January 31, 1899.

	PENDERTON FUND.		BOYLSTON EDUCATION FUND.		BOYLSTON RELIEF FUND.		MASON FUND.		DEXTER FUND.		JEFFRIES FUND.		LUCY BULLMAN CHARITY.		THE DAVID SEARS CHARITY.		PIERCE FUEL FUND.		HOLTON PROTESTANT PAUPER FUND.		HOLTON PROTESTANT POOR FUND.		STOUGHTON POOR FUND.		GOODNOW FUND.		RACHEL T. STEVENS FUND.		MOSES HUNT FUND FOR THE DESTITUTE.		TOTAL.		
	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	Receipts.	Payments.	
Cash, January 31, 1898	\$1,990 02		\$1,380 73		\$1,365 66		\$203 86		\$469 34		\$465 86		\$130 79		\$1,618 08		\$46 16		\$446 17				\$70 12		\$478 10				\$565 42		\$5,634 15		
RECEIPTS.																																	
Bank Dividends, including Tax Refunded by the State	1,496 28		410 30		215 12																										2,120 70		
Interest on City Notes	1,585 00		6,607 50		1,060 00		40 00		188 75		268 75		917 50		\$10,600 00		90 00		170 00		\$75 00		127 50		290 00		\$120 00		420 00		25,650 00		
On Account of Stock in Liquidating Banks	810 00		4,440 00																												5,250 00		
Interest on United States Bonds					292 00																										292 00		
Interest on Deposits	5 28		30 95		26 90		6 60		10 29		11 59		8 97		8 55		1 30		10 95		94		3 00		10 51		20		8 86		144 98		
Rents													1,586 10		798 99												120 83				2,005 92		
Dividends on Fifty Associates' Stock															2,280 00																2,280 00		
Aid Refunded													75 00																		75 00		
PAYMENTS.																																	
Pensions		\$6,075 00				\$1,275 00									\$13,630 00															\$350 00		\$21,530 00	
Board of Boys at Farm School				\$1,676 99																												1,676 99	
Board of Boys at the House of the Angel Guardian				876 87																												876 87	
Board of Boys and Girls, Children's Aid Society				939 35																												939 35	
Board of 1 Boy at Working Boys' Home				785 14																												785 14	
Board of Girls at St. Vincent's Asylum				864 56																												864 56	
Board of 1 Girl at Mt. St. Joseph Academy				416 00																												416 00	
Paid on account of salary of the Chaplain of the House of Industry																																	
Grants													\$2,179 00																			2,179 00	
Paid for turkeys for Brighton Poor																			\$15 29		\$75 94										91 23		
Paid Beneficiary																												\$110 20				110 20	
Paid Treasurer of Charlestown Poor Fund																	\$91 62															91 62	
Paid Tax on Real Estate in Somerville																												48 22				48 22	
Paid for New Fence at Longwood															186 00																	186 00	
Coal								\$72 63																								72 63	
Cash, January 31, 1899		2,440 58		7,310 87		1,392 68		\$842 46		595 75		\$746 20		539 36			45 93		611 83				\$200 62		578 61		82 61		634 28			14,165 24	
Cash overdrawn															1,656 54																		
Total	\$8,555 58	\$8,555 58	\$12,869 48	\$12,869 48	\$2,667 68	\$2,667 68	\$542 46	\$542 46	\$668 38	\$668 38	\$746 20	\$746 20	\$2,718 36	\$2,718 36	\$15,434 08	\$15,434 08	\$137 55	\$137 55	\$627 12	\$627 12	\$75 94	\$75 94	\$200 62	\$200 62	\$778 61	\$778 61	\$241 03	\$241 03	\$984 28	\$984 28	\$43,972 75	\$43,972 75	

E. E.

Boston, January 31, 1899.

RICHARD C. HUMPHREYS, Treasurer.



TRUST FUNDS IN THE HANDS OF THE OVERSEERS OF THE POOR.

Pemberton Fund.—This fund comprises bequests and gifts made to the city of Boston from 1760 to the present time from “A. B.,” Daniel Oliver, Margaret Blackader, Alice Quick, Anne Wheelwright, Mary Ireland, Benjamin Pemberton, Martha Stevens, Mrs. H. Driscoll, William Breed, Samuel Eliot, John Coffin Jones, Mary Belknap, “A Citizen of Boston,” Anonymous, Miss Dr. Harriot K. Hunt, George Higginson, Walter E. Hawes, and William B. Spooner. The most important, however, of the bequests was from Benjamin Pemberton, Esq., whose will was proved June 25, 1782, and for that reason his name has been given to the fund. The income of this fund is to be expended, at the discretion of the Overseers, in semi-annual payments to the poor of the city.

Boylston Relief and Education Funds.—These funds were from a bequest by John Boylston, who died in London, England. His will was proved June 12, 1795. One portion of the bequest is ordered to be paid to “poor and decayed householders of the town of Boston not under fifty years of age; persons of good character, and reduced by the acts of Providence, not by indolence, extravagance, or other vice.” The other portion to be applied to the “nurture and instruction of poor orphans and deserted children of the town of Boston until fourteen years of age.”

Mason Fund.—A bequest from Jonathan Mason, by will dated July 15, 1798, interest to be paid annually “to the standing chaplain of the almshouse and workhouse, or by whatever other name called;” interest to be added until one is appointed. The interest is now paid semi-annually towards the salary of the chaplain of the House of Industry.

Dexter Fund.—A bequest from Samuel Dexter, by will dated May 7, 1811, “for supplying with firewood or coal such poor persons, objects of charity, as are not supported in the almshouse, though sometimes relieved by the Overseers of the Poor.”

Jeffries Fund.—A bequest by David Jeffries, former Town Treasurer. Will dated January, 1786: “Income to be applied to the purchase of tea, coffee, chocolate, and

sugar, for the refreshment of those persons who, in the providence of God, are or shall be reduced and obliged to take shelter in the almshouse, after having lived reputably; the Overseers of the Poor to be the judges as to the persons, but always giving the preference to the pious poor."

Lucy Bullman Charity consists of an estate on Cambridge and Joy streets, in this city, which came into the possession of the city of Boston, in accordance with the will of Lucy Bullman, proved at Probate Court, Suffolk County, January 9, 1832, in which it is provided that, upon the death of certain persons therein named, said estate is given to the city of Boston, upon the condition that the estate should never be sold, but the income used for the benefit of the poor. By a vote of the City Council, approved by the Mayor, January 4, 1873, this estate was placed in charge of the Overseers of the Poor.

The David Sears Charity is a fund contributed by the late Hon. David Sears for the relief of the poor, the income only to be expended "in aid and for the support of citizens or families who may have seen better days, and for charity in all its forms, in such a manner as may best tend to alleviate the sufferings of human life and render the condition of the poor more comfortable."

Pierce Fuel Fund.—The legacy of Caleb Pierce to the city of Charlestown, accepted by the City Council of that city, May, 1861: "Income to be expended in the purchase of fuel, to be distributed to those indigent widows whose husbands, before their decease, had resided in Charlestown at least one year, and the said widows still continuing to reside in Charlestown at the time of receiving said bounty. Income payable annually to the Trustees of the Charlestown Poor Fund."

Holton Protestant Poor Fund.—A bequest by James Holton to the inhabitants of the town of Brighton: "Income to be annually expended forever in purchasing and distributing provisions among poor and indigent Protestant families in said town of Brighton, on Thanksgiving or other holidays, or just previous to such holidays, to the end that such poor Protestant families may have the means, in some degree, of enjoying such holidays in common with their fellow-citizens; and I specially direct that in such periodical distributions unmarried Protestant females who are poor or needy shall receive a liberal share of provisions, and also other articles of comfort, such as such distributors shall deem to be the most conducive to the comfort and happiness of that lone class of citizens."

Holton Protestant Pauper Fund.—A bequest by James Holton to the inhabitants of the town of Brighton: "Income to be annually expended, in whole or in part, as necessity or circumstances may require, by the Selectmen of said town, in providing good and plentiful meals on Thanksgiving day or other holidays, to the Protestant paupers of said Brighton." Unexpended income to be added to the principal.

Stoughton Poor Fund.—A bequest of Lieut.-Gov. William Stoughton, who died July 7, 1701. By his will he gave £50 to the relief of the poor of Dorchester, to be improved by the care of the Selectmen, the income to be distributed to the most needy inhabitants.

Goodnow Fund.—A bequest of Elisha Goodnow (to be paid over upon the decease of his wife) to the city of Boston and its assigns, "to be invested and the income applied forever to and for the relief, assistance and support of the poor, sick and infirm in said city, not supported by the said city in its almshouse, in such manner as the said city, or the government or officers thereof, may deem most judicious, but without reference to the religious faith or belief of those who may apply for or need the assistance of this fund." Five thousand dollars, received April 29, 1885.

Rachel T. Stevens Fund.—A bequest of Rachel T. Stevens, the net income to be paid (after the death of a person named in the will) "for the support and maintenance of poor, worthy Protestant single women of Boston, who have arrived at the age of fifty years (not including widows), paying to each of such women during her life the sum of one hundred dollars in semi-annual payments. Upon the marriage of any beneficiary under this will no further payment of money is to be made to her, nor is any further payment of income to be made to any beneficiary who becomes unworthy of help under this trust."

Moses Hunt Fund for the Destitute.—"The income to be devoted to the relief and welfare of Protestant destitute residents of that part of said Boston which was Charlestown." Ten thousand dollars, received March 7, 1889, has been invested in a City of Boston note.

OVERSEERS OF THE POOR, 1898-99.

[One-third of the Board is appointed annually by the Mayor,
subject to the approval of the Board of Aldermen.]

Terms expire April 30, 1899.

ISAAC T. CAMPBELL,	MICHAEL A. KERRIGAN,
RACHEL E. S. THORNDIKE,	LOUISE S. O'BRIEN.

Terms expire April 30, 1900.

ANNETTE P. ROGERS,	MATTHEW J. MULLEN,
FREDERICK W. STUART,	J. HOMER PIERCE.

Terms expire April 30, 1901.

WILLIAM P. FOWLER, <i>Chairman</i> ,	EDITH P. WOLCOTT,
THOMAS SPROULES,	HENRY L. PLUMMER.

RICHARD C. HUMPHREYS, *Treasurer*.
BENJAMIN PETTEE, *Secretary*.

The Board meets on the first Wednesday of every month,
at its office in Charity Building.

The Overseers of the Poor are likewise incorporated as a Board of Trustees of John Boylston's and other charitable funds, left for the assistance of persons of good character and advanced age, "who have been reduced by misfortune to indigence and want."

COMMITTEES.

Investigation and Relief.

Messrs. Fowler and Sproules, Miss Rogers, Mrs. Wolcott,
Mrs. Thorndike, Mr. Mullen and Dr. Stuart.

Finance and Accounts.

Messrs. Pierce, Mullen and Plummer.

Employments and Settlements.

Mrs. Thorndike, Miss O'Brien and Dr. Plummer.

Supplies.

Messrs. Fowler, Sproules and Kerrigan.

Temporary Home.

Miss Rogers, Mrs. Wolcott and Mr. Sproules.

Lodge for Wayfarers and the Wood-yard.

Mr. Fowler, Miss Rogers and Mr. Kerrigan.

Building.

Mr. Sproules, Miss Rogers and Dr. Campbell.

Real Estate.

Mr. Mullen, Miss O'Brien and Mr. Pierce.

Medical.

Dr. Campbell, Mrs. Thorndike and Dr. Stuart.

Burials.

Dr. Stuart, Miss O'Brien and Dr. Campbell.

Boylston Education Fund Beneficiaries.

Mrs. Wolcott, Mrs. Thorndike and Mr. Pierce.

Holton Funds.

Mr. Mullen.

OVERSEERS OF THE POOR WERE FIRST CHOSEN
IN BOSTON IN 1691.

MEMBERS OF THE BOARD FROM ITS REORGANIZATION IN 1864.

- * Allen, Ira, 1868 to 1875 (died August 29).
- * Amory, Thomas C., 1864 to April, 1883.
- * Atkins, Ebenezer, 1864 to December 31, 1867 (died).
Ayer, James B., April, 1890, to May, 1893.
- * Bailey, Joseph T., November, 1866, to 1871.
- * Bigelow, Alanson, 1875 to April, 1881.
- * Blasland, Thomas, 1866 to 1873 (died September 5).
- * Buckley, Joseph, 1864 to 1875.
Burnham, Daniel S., from April, 1885, to May, 1891.
- Campbell, B. F., October, 1882, to July, 1888.
- Campbell, Isaac T., 1873 to date.
- Caton, Asa H., December, 1890, to 1893.
- Coleman, Charles, 1893 to May, 1896.
- * Crane, P. M., 1870 to 1882 (died August 13).
- * Cruft, Samuel B., 1871 to 1877.
Cunningham, Henry V., 1893 to April, 1898.
- Curry, M. C., 1883 to May, 1896.
- * Curtis, George, 1876 to September, 1878.
Davis, James G., 1880 to 1886.
Day, Frederick W., May, 1898, to January, 1899.
- Dore, John P., 1879 to May, 1891.
- Downey, Thos., jr., 1887 to April, 1890, and May, 1891,
to January, 1895.
- * Fabyan, George, 1869 to 1874 (died May 25).
Fisher, Andrew P., from April, 1889, to May, 1893.
- Fowler, William P., from April, 1889, to date.
- * Friedman, Solomon, 1886 to December, 1890.
Gargan, Thomas J., 1874 to 1875.
- * Gorman, William, 1877 to 1880 (died January).
- * Griffin, Martin, 1864 to 1869.
- * Hale, George S., 1865 to 1871.
- * Hull, Liverus, 1874 to April, 1883.
Humphreys, Richard C., May, 1890, to September, 1898.
- Kerrigan, Michael A., April, 1898, to date.
- Lamb, John, 1891 to May, 1897.
- * Lawrence, William R., 1864 to November, 1865.

- * Lincoln, F. W., May, 1867, to April, 1878.
- * Little, James L., November, 1865, to November, 1876.
- * Lothrop, Loring, 1864 to April, 1870.
Logue, Charles, May, 1896, to January, 1898.
- Madden, Daniel A., 1883, to April, 1889.
- Mullen, Matthew J., July, 1897, to date.
- * McLean, Charles R., 1868 to 1871.
- * Newmarch, S., 1864 to 1865.
Newell, Otis K., from July, 1888, to May, 1891.
- O'Brien, John, 1871 to 1874.
O'Brien, Louise S., April, 1898, to date.
- Parker, Augustus, November, 1878, to April, 1880.
- Parker, Charles F., June, 1895, to May, 1898.
- * Parker, F. E., 1864 to 1875.
- * Pickering, H. W., 1875 to April, 1884.
Pierce, J. Homer, from October, 1898, to date.
- Plummer, Henry L., January, 1899, to date.
- Prescott, Washington L., 1875 to December, 1878.
- Richards, Henry L., 1877 to August, 1878.
- * Richards, Joel, 1864 to 1866.
- * Ring, Thomas F., November, 1878, to April, 1887.
Rogers, Annette P., 1891 to date.
- * Sawin, Samuel D., April, 1884, to July, 1890 (died).
- Scott, John A., April, 1881, to April, 1884.
- * Spooner, William B., 1864 to 1868.
Sproules, Thomas, 1883 to date.
- * Stackpole, Stephen A., 1880 to April, 1883.
Stuart, Frederick W., December, 1896, to date.
- Sullivan, Daniel F., 1893 to June, 1895.
- Sweetser, John, December, 1878, to April, 1879.
- Temple, Thomas F., 1870 to April, 1890.
- Thorndike, Rachel E. S., May, 1896, to date.
- Turner, John, September, 1890, to May, 1893, and January, 1895, to November, 1896.
- * Warren, John W., 1864 to April, 1866.
Welch, William J., April, 1884, to April, 1889.
- Willcutt, Levi L., 1878 to April, 1885.
- * Winthrop, Robert C., 1864 to May, 1867.
Wolcott, Edith P., 1893 to date.

Chairmen.

- * Winthrop, Robert C., July, 1864, to May, 1867.
- * Lincoln, F. W., June, 1867, to April, 1878.

Temple, Thomas F., April, 1878, to December 31, 1878
and from April, 1881, to April, 1890.

* Amory, Thomas C., January, 1879, to April, 1881.

Newell, Otis K., April, 1890, to May, 1891.

Fowler, William P., May, 1891, to date.

Treasurers.

* Warren, John W., July, 1864, to January, 1865.

* Norcross, Otis, January, 1865, to January, 1876.

* Higginson, George, 1876 to 1878.

* Lincoln, F. W., April, 1878, to September 13, 1898 (died).

Humphreys, Richard C., November, 1898, to date.

Secretaries.

* Pratt, John, July, 1864, to November, 1874 (died).

Pettee, Benjamin, November, 1874, to date.

Occupants of Charity Building.

Basement Rooms.

City Physician	Nos. 3 and 4
Homœopathic Dispensary	No. 5
Federation of Jewish Charities	Nos. 11 and 13

First-Story Rooms.

Overseers of the Poor	Nos. 15 to 20
State Aid Paymaster	" 21 to 24
Industrial Aid Society	" 25 to 28

Second-Story Rooms.

Associated Charities	Nos. 30 and 31
Boston Ladies' Sewing Circle	" 35 and 37
Boston Provident Association	Nos. 32, 33, 38 and 40
Society of St. Vincent de Paul	No. 36
German Aid Society	" 39

* Dead.

Third-Story Rooms.

Hall for General Meetings	No. 41
Boston Children's Aid Society	" 43
Co-operative Society	" 48
Ward 6 Conference, Associated Charities	" 49
Ward 8 Conference, Associated Charities	" 50
Ward 7 Conference, Associated Charities	" 51

In addition to the above, the Boston Police Relief Association holds its annual meeting here.

SCHEDULE OF PROPERTY IN CHARGE OF THE BOARD.

Charity Building: four rooms, occupied by the Board and its officers, have furniture needed for their use, desks, cases, chairs, etc.

City Temporary Home is supplied with furniture necessary to provide temporary accommodations for homeless women and children.

The Lodge for Wayfarers, for men, has furniture suitable for its use. At the Lodge, and at the wharf hired for the storage of wood, there are at the present time about 281 cords of wood. Also one wagon.

In a storehouse in the yard of Charity Building, the following groceries for delivery to the poor, and store fixtures:

27½ bbls. sugar.	222 cans cond. milk.
19 chests tea.	134 ½-lb. boxes cocoa.
34½ boxes soap.	200 bushels potatoes.
2½ bbls. Indian meal.	3 bushels peas.
4¼ bbls. rice.	117 lbs. cotton twine.
5 bbls. salt pork.	119 lbs. jute twine.
69½ bbls. flour.	1,500 tags.
40 packag's paper bags.	10 dry measures.
181 baskets.	8 tunnels.
725 lbs. paper.	5 chairs.
6 scales.	1 truck.
8 scoops.	2 hatchets.
2 desks.	1 meat-saw.
96 bushels beans.	1 butcher-knife.
⅝ bbl. oatmeal.	1 meat-hook.
1,300 lbs. salt fish.	1 shovel.

FEBRUARY 1, 1899.

APPENDIX.

[CHAP. 425, ACTS OF 1898.]

AN ACT RELATIVE TO THE PAUPER LAWS OF THE COMMONWEALTH.

Be it enacted, etc., as follows:

SECTION 1. Clause fifth of section one of chapter eighty-three of the Public Statutes is hereby amended by inserting after the word "and" — in the second line, the words: — within that time — so that the clause as amended shall read as follows: — Fifth— Any person of the age of twenty-one years, who resides in any place within this state for five years together, and within that time pays all state, county, city or town taxes, duly assessed on his poll or estate, for any three years within that time, shall thereby gain a settlement in such place.

SECT. 2. Section six of said chapter is hereby amended by striking out the whole of said section and inserting in place thereof the following: — *Section 6.* All settlements not fully acquired subsequent to the first day of May in the year eighteen hundred and sixty, are hereby defeated and declared to be lost, except where the existence of such settlement prevented a subsequent acquisition of settlement in the same place: *provided*, that whenever a settlement acquired by marriage has been thus defeated, the former settlement of the wife, if not defeated by the same provision, shall be thereby revived. All persons absent from the Commonwealth of Massachusetts for ten years in succession shall lose their settlement.

SECT. 3. Section six of chapter eighty-four of the Public Statutes is hereby amended by adding at the end thereof the words: — and hereafter the same legal obligation to support her pauper children shall rest upon the mother as now by law rests upon the father: *provided, however*, that the mother shall not be liable to criminal prosecution for the enforcement of such legal obligations, — so as to read as follows: — *Section 6.* The kindred of such poor persons, in the line or degree of father or grandfather, mother or grandmother, children or grandchildren, by consanguinity, living in this state and of sufficient ability, shall be bound to support such paupers, in proportion to their respective ability, and hereafter the same legal obligation to support her pauper children shall rest upon the mother as now by law rests upon the father: *provided, however*, that the mother shall not be liable to criminal prosecution for the enforcement of such legal obligation.

SECT. 4. Section seven of said chapter eighty-four is hereby amended by striking out the whole of said section and inserting in place thereof the following:—*Section 7.* Any justice of the superior court sitting in equity in the county where any one of such kindred to be charged resides, upon complaint of any city, town or kindred who has been at expense for the relief and support of such pauper, may, on due hearing, assess and proportion thereto such sum as he shall deem reasonable for or toward the support of the pauper to the time of such assessment, and may enforce payment thereof by execution in common form: *provided*, that such assessment shall not extend to any expense for relief afforded more than two years previous to the filing of the complaint.

SECT. 5. Section eighteen of said chapter eighty-four, as amended by section one of chapter ninety of the acts of the year eighteen hundred and ninety-one, is hereby amended by striking out the whole of said section and inserting in place thereof the following:—*Section 18.* A city or town may furnish aid to poor persons found therein, having no lawful settlement within the state, if the overseers of the poor deem it for the public interest; but, except in cases of sickness, not for a greater amount than two dollars a week for each family during the months of May to September, inclusive, or three dollars a week for the months of October to April, inclusive, and the overseers shall in every such case give immediate notice by mail to the state board of lunacy and charity, which board shall examine the case, and should they direct discontinuance, shall remove such persons to the state almshouse, or to any state or place where they belong, when the necessities of such persons or the public interest require such removal, and the superintendent of said almshouse shall receive the persons so removed thereto the same as though sent in accordance with the provisions of section twenty-one of chapter eighty-six of the Public Statutes, as amended by chapter eighty-four of the acts of the year eighteen hundred and ninety-one, and a detailed statement of expenses so incurred shall be rendered, and, after approval by the state board of lunacy and charity, such expenses shall be paid from the state treasury.

SECT. 6. Section forty-eight of chapter three hundred and seventeen of the acts of the year eighteen hundred and ninety-four is hereby amended by striking out the whole of said section and inserting in place thereof the following:—*Section 48.* The treasurer of any such corporation shall, upon a written request signed by an overseer of the poor of a city or town, or an officer of the state board of lunacy and charity, inform him of the amount, if any, deposited in the corporation to the credit of any person named in such request, who is a charge upon the Commonwealth or upon a city or town therein as a pauper, and a treasurer who unreasonably refuses to give such information, or wilfully renders false information, shall forfeit fifty dollars for every such offence to the use of the city or town upon which such pauper is a charge, or to the Commonwealth if the pauper is a charge upon the Commonwealth, and the treasurers of benefit associations, insurance companies and safety deposit companies shall in like manner and subject to the same conditions give information to the overseers of the poor and state board of lunacy and charity.

SECT. 7. This act shall take effect upon the first day of July in the year eighteen hundred and ninety-eight. [*Approved May 13, 1898.*]

[CHAP. 479, ACTS OF 1898.]

AN ACT RELATIVE TO THE PROMOTION OF ANATOMICAL SCIENCE.

Be it enacted, etc., as follows:

SECTION 1. Upon the written application of the dean or other officer of any medical school established by law in this Commonwealth, the overseers of the poor of a city or town, the trustees for children of the city of Boston, the pauper institution trustees of said city, the insane hospital trustees of said city, the penal institution commissioner of said city, the trustees and superintendent of the state almshouse, state farm, or other public institution supported in whole or in part at the public expense, except the soldiers' home in Chelsea, shall, in accordance with the provisions of this act, give such dean or other officer permission to take the bodies of such persons dying in such town, city, city institution, state almshouse, state farm or public institution, as are required to be buried at the public expense, within three days of their death, to be used within the state for the advancement of anatomical science; *provided*, that such permission shall not be given to take the body of any soldier or sailor, known to be such, who has served in the war of the rebellion or in the war between the United States and Spain. In giving such permission, regard shall be had to preserving, as far as practicable, a fair proportion between the number of students in attendance at such institutions and the number of such bodies delivered to them respectively.

SECT. 2. Such dean or other officer, before receiving any such dead body, shall give to the board or officer surrendering the same to him a sufficient bond, that such body thus received by him shall be used only for the promotion of anatomical science within this Commonwealth, and in such manner as in no event to outrage the public feeling, and that, after having been so used, the remains shall be decently buried, and further that it shall not be so used until the expiration of fourteen days from the date of the death of such deceased person, and further that such body shall, during said fourteen days, be kept in such condition and in such a place that it may be viewed by any person, at all reasonable times, for the purpose of identification.

SECT. 3. If the deceased person during his last sickness, of his own accord, requests to be buried, or requests that his body be delivered up to any friend; or, if within fourteen days after the death of such deceased person, any person claiming to be, and satisfying the authorities that he is a friend or is of kindred to the deceased, asks to have the body buried or surrendered to himself, or if such deceased person was a stranger or traveller who suddenly died, the body shall not be given up as aforesaid to such dean or other officer, but shall in conformity with such request be either buried or delivered to such friend or kindred.

SECT. 4. So much of chapter eighty-one of the Public Statutes, chapter three hundred and ten of the acts of the year eighteen hundred and eighty-seven, and chapter one hundred and eighty-five of the acts of the year eighteen hundred and ninety-one, as is inconsistent with this act, is hereby repealed.

SECT. 5. This act shall take effect upon its passage. [Approved May 27, 1898.]



ANNUAL REPORT
OF THE
PARK DEPARTMENT
FOR THE YEAR 1898.

COMMISSIONERS' REPORT.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

SIR, — The Board has the honor herewith to submit to you its report for the financial year of 1898–99.

Last winter the original plans for park construction were carefully revised, and by the omission of expensive buildings and other features which were not essential to the harmonious completion of the park system, and its enjoyment by this generation, the amount we finally considered necessary to complete the parks was cut down one-half, that is to say, from about \$3,000,000 to about \$1,500,000. Of this sum we have obtained \$500,000, and shall now be compelled to ask

for the remaining million, after the expenditure of which, we believe that the period of park construction will be ended, and we confidently expect to show to the people of Boston something seldom seen, certainly in this country, a completed park system.

We may summarize the work of the year by saying that it has consisted principally in building boundary walls and planting boundary trees, and in planting trees along the parkways and in other parts of the parks where they have been much needed, notably in Wood Island Park, and in pruning and otherwise taking care of the old trees and shrubs much neglected during the many years of road building and other construction, thus giving freedom for new life and vigor to the trees and shrubs, and letting in the sunlight to the encouragement of the undergrowth and of the song birds who make it their home; in building roads in somewhat delayed performance of our contract with Harvard College, on Peters' Hill, and the new Francis Parkman road by Jamaica pond, in both localities opening delightful views to the public; in Franklin Park, substituting a grassy glade for the expensive Greeting or concourse; in much loaming where no loam has been before, or where it has been put in insufficient quantities; covering over the old gravel pits, taking down the Galvin house and the sheep barn, and otherwise removing artificial blemishes from this beautiful park. In all our work we have endeavored, so far as consistent with proper park construction, to put things in such condition that the city will in the future be called upon for the least annual expense for maintenance.

The loss of Castle Island this year has been most severely felt, but we have the assurance of the War Department that it will be restored to us in the near future. Charlesbank, as usual, has afforded enjoyment and athletic training to thousands of persons, and multitudes, as in former winters, have frequented our various skating grounds.

The act of the Legislature, authorizing this Board, with the approval of the Mayor, to purchase playgrounds in different parts of the city, and appropriating \$500,000 therefor, not more than \$200,000 to be spent in any one year, was not approved by the City Council till December 31, 1898. Therefore no action under this statute has yet been taken. The crying need of the children in the densely populated parts of the city for something better than the streets to play in is manifest to all our citizens, and in view of the high value placed upon Boston real estate, \$500,000 seems all too small.

We believe that the city can wisely expend a much larger sum for this purpose.

We again call attention to the fact that our benevolent citizens can in no other way confer greater benefit on the community, or erect more enduring monuments of their public spirit, than by endowing the city with playgrounds.

All our available playgrounds are crowded in good weather, but to put some of them in condition for further and better use we need further appropriations from the city.

The details of the year's work are clearly and fully set forth in the reports of our Superintendent and of our Engineer, and the details of our expenditures in the financial statements which accompany our report.

Respectfully submitted,

CHARLES E. STRATTON,
LABAN PRATT,

Commissioners.

BOSTON, January 31, 1899.

SUPERINTENDENT'S REPORT.

TO CHARLES E. STRATTON, LABAN PRATT,

Commissioners :

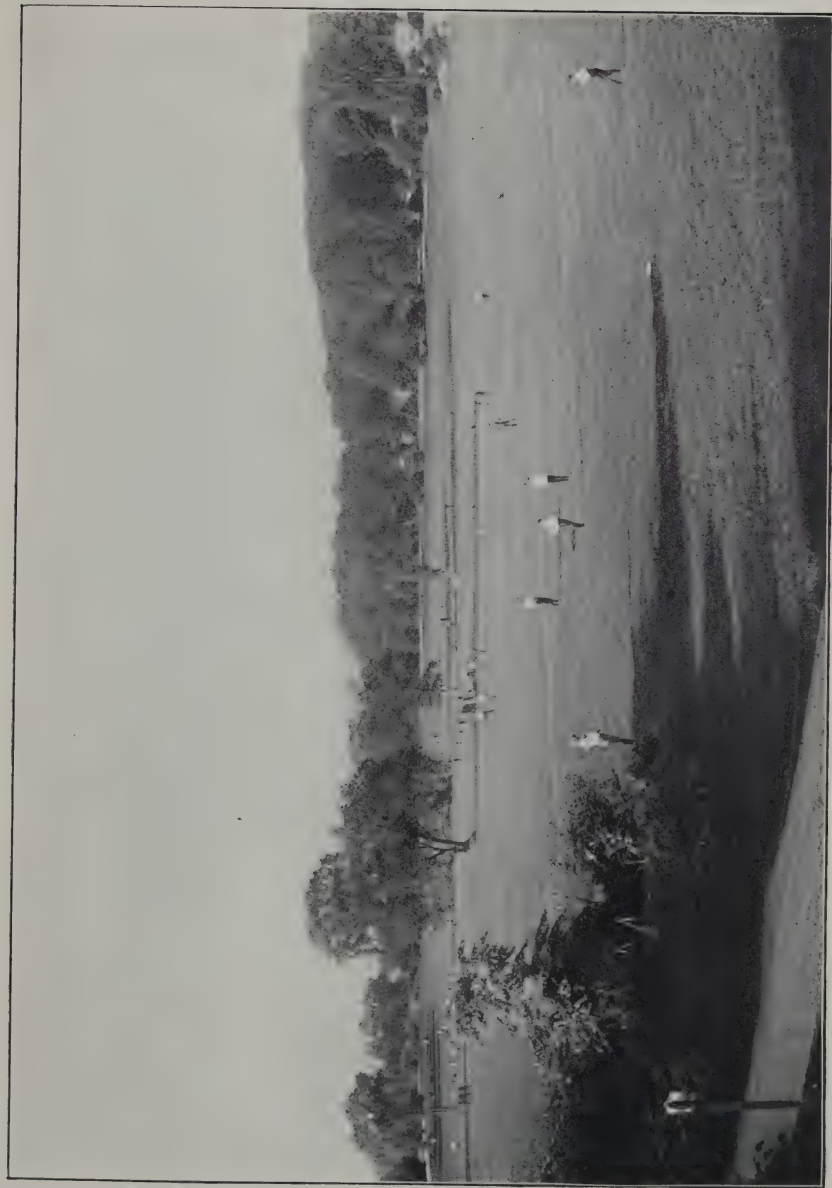
GENTLEMEN, —I herewith submit a report of the work performed, under the direction of your Board, in this department, during the year 1898 :

FRANKLIN PARK.

In carrying out the design of your Board to preserve and accentuate the New England woodland character of Franklin Park, it became necessary to remove quantities of exotic trees and shrubbery which did not blend harmoniously with the native plants ; such old friends as the common and Thunberg's barberry, the common privet and a few others have been retained ; although not indigenous, these seem, by long association and fitness, to belong to New England's woodlands.

The thinning out of overcrowding trees was completed early last spring. The beneficial result of this work of the past three winters is now quite evident in the great improvement in the health and growth of the remaining trees ; the increase of underwood, encouraged by the admission of light, has heightened the natural effect, relieving the woods, in a great measure, from the monotonous appearance where trees are allowed to grow thickly together to their mutual destruction ; to the destruction, also, of the undergrowth, the varied forms of which add so much that is charming in woodland scenery.

The improvement of the Glade has been nearly completed. Drainage has been provided for its marshy hollows by cutting through the rock for a connection with the Nazingdale meadow drain. The Glade and the woods on either side, which were very deficient in soil covering, have been given a six to ten-inch dressing of good loam and seeded with grass. This treatment will invigorate the trees that have suffered from exposure of roots and want of nourishment. These woods are set apart for picnic purposes and are subjected to hard usage, so that undergrowth cannot exist except in a torn and dilapidated state. Several knolls and pieces of high ground that were needed for planting to emphasize the glade-



THE PLAYSTEAD, FRANKLIN PARK.

like character of the surroundings, were liberally covered with loam, the ground being first plowed with a subsoil plow; this treatment cannot fail to produce vigorous growth in the plantations. The result of the work is very satisfactory, transforming an unkempt tract of ground covered with piles of stone, loam and other material, into a pleasing turf-covered Glade. A pathway on one side, meandering within the shade of the bordering woodland, gives easy access from Blue Hill avenue to the children's playground, while the Glade, conveniently near the shade of the picnic woods, serves as a playground for picnic parties.

Among the important operations of the past season has been the laying out of bordering plantations, important in the necessity for producing as soon as possible a screening belt of woodland on the borders of the park. This bank of foliage serves to give seclusion as well as to form a background for views within the park, which contains in its centre a magnificent meadow; across its rolling contour are to be found the most delightful landscape effects, which are now marred in places by the intrusion of street life with its accompaniment of trolley cars, telegraph poles and other features destructive of quiet retirement.

It is not desirable nor necessary to omit the planting of any part of the borders of Franklin Park in the fear of shutting out views of interest lying beyond the park; there are many elevated points on the drives and walks where extensive outlooks can be obtained, a notable one being that from Hagborn Hill, where a view to the Blue Hills — six and a half miles away — is one of seemingly unbroken forest. For these reasons the work of planting the borders has been vigorously prosecuted during the past year.

Plantations have also been made at the old Williams house site and on the hillside bordering the Glade; much has also been done on the borders of plantations and old woodlands in the way of planting witch and common hazels, red-buds, dogwoods, June-berries and thorns, in the effort to extend the foliage line nearer to the ground.

Two gangs of four men each were kept steadily at work pruning trees, from June of the past year until the fall of the leaves. In the work of cutting out dead, diseased, or interfering limbs, the men are becoming expert; they begin to comprehend its importance, and to understand the art of pruning to correct defects in form or constitution.

The old gravel pits on the line of Scarboro' Pond have been filled and graded to an undulating slope, reaching from the winding of the road near the top of Scarboro' Hill down to

the tennis grounds, thereby opening a very pleasing view of the meadow below. Projecting knolls and bluffs have been prepared, or are in preparation for planting at the proper season, which will add materially to the woodland effect of Scarboro' Hill on the north.

A marked improvement has been made on the west and south slopes of the Hill, by the removal of the sheep barn and the Galvin house. The service roads to the house, the exotic trees and shrubs have also been removed in the endeavor to restore this beautiful piece of woodland to a natural condition. The site of the greenhouses and barn including the slopes have been graded and loamed, and are now ready for the planting of forest trees.

The nurseries have been enlarged to accommodate the increasing stock of trees and shrubs added by purchase or propagation; the stock is large and in fine condition. Further extensions are necessary to receive the thousands of seedlings of native trees and shrubs now ready to be transferred from the seed beds to nursery rows.

We have continued the transplanting of large trees during the past year. While this practice cannot generally be defended on account of its costly character and danger of loss, yet the circumstances seemed to warrant it in our case. The trees are fine ones, ranging from hemlocks and white pines, six to ten feet high, to oaks, hard maples, ash and linden, four to eight inches in diameter. Planted in groups, eight or ten years ago, they were injuring each other by overcrowding, and it seemed wasteful to apply the axe, in spite of the extra cost. Those transplanted one year ago are in fine condition, and well repay the cost. The method employed is the removal of the tree with a large frozen ball of earth, and thinning out the branches sufficiently to compensate for root cutting. There will be little further need of transplanting large trees; an abundance of fine stock of convenient size can be had from the thinning out of young plantations which have been set out during the past two years.

The foundation of Seaver street boundary wall has been laid, and a contract made for the erection of the superstructure. The Forest Hills traffic road has been partially completed and opened for use, which relieves the Arborway crossing at Forest Hills street from funeral processions.

Abbotswood, having been very popular as a resort for picnic parties, for many years past, shows the effect of wear; the loam, from want of undergrowth to hold it in place, has washed down the slopes, exposing the roots of the trees to

their injury and, eventually, to their destruction. To correct this the surface has been partly dressed with loam to a depth of six or seven inches, which when completed, will be seeded in grass, and picnic parties will be excluded during the coming season at least.

To provide a site for an administration yard to contain stable, shops, sheds, etc., an excavation was made during the past season in the hill at the nursery, the material excavated being used to fill up the swamp on the Morton street boundary nearby. The yard location is very convenient and easily screened from view.

A brick stable 74 by 38 feet containing twenty-seven stalls is nearly completed. The retaining wall of the bank surrounding two sides of the yard is now under construction, loose rocks from the grounds being used for the purpose. When completed this will serve for a back wall for sheds and shops, plans for which are now in preparation in our Engineering Department for the consideration of your Board.

THE ARBORETUM.

The construction of the road around Peters' Hill was completed during the past season, excepting the connection across the new line of Bussey street, which required a deep fill; this was reserved for winter work. The construction of this roadway adds 1.2 miles to the total length of drives, and is remarkable for its commanding position; from no other location can such magnificent views of the charming scenery around Boston be obtained. The grading of the road slopes has been nearly completed in readiness for planting and the walks will be constructed at the opening of the season.

The Arboretum, or Bussey ledge, produced a very fine quality of macadam, during the past season, and the work of production was handled with skill and economy.

WEST ROXBURY PARKWAY.

This tract extends from the Walter street entrance of the Arboretum to the Stony Brook Reservation; it is of varying width, and contains much fine timber. The purpose of its development is to provide a parkway connection between the Boston Park System at the Arboretum, and the Metropolitan System at Stony Brook Reservation, a distance of 2.4 miles. A roadway is now being staked out, and studies of its drainage and construction are being made, awaiting the funds

necessary for building the road. During the past winter the woodlands throughout this parkway have been cleared of dead and overcrowding trees.

JAMAICA PARK.

The completion of the construction of the Francis Parkman road on the west bank of Jamaica Pond, and the improvement of Perkins street, during the past summer, have opened a new road connection of great beauty between the Brookline road, and the Arborway at Pond street. A footpath has also been made along the bank above the edge of the pond within the timber line; the slopes have been graded and planted with pines, hemlocks, beeches and birches, and a variety of native shrubs. A large quantity of loam was used where the soil seemed to be thin or poor.

A carriage shed of five stalls has been built for service at the Headquarters Building at Pine Bank, and the old Perkins barn taken down. The removal of the neck on which the barn formerly stood — a work that has been ordered by the Board — will lengthen a pleasing ravine effect extending back from the water to the northward.

When the Perkins street, and Prince street boundary walls — now under contract — are completed, the heavy construction work of Jamaica Park may be said to be finished, with the exception of the area at Pine Bank, on which work will be commenced at the opening of spring.

LEVERETT PARK.

Little has been done at Leverett Park. The improvements planned had only been commenced, when cold weather set in and stopped the work. The old pumping-station was taken down, in itself a marked improvement, removing as it did the suggestion of a factory within the park. Some work was done towards filling up the small ponds. The greater part of the boulders, scattered about, was removed and used for the wall foundations at Jamaica Park. The rearrangement of the old plantations was continued during the year; and additional plantations were made, notably the one in the open space north of Willow Pond road. A plantation of kalmias was introduced on the east bank of Spring Pool, while a continuation of the same bank running northward is in preparation for rhododendrons, next to which a colony of azaleas is to be planted. In a few years, this bank, with such



EDGE OF THE HEMLOCK WOODS IN THE ARBORETUM.

treatment, can hardly fail to be very interesting and attractive when viewed from the walk on the opposite side of the chain of pools.

CHARLESBANK.

This popular playground and gymnasium maintained its reputation as a resort for young people. The afternoon classes commenced at four o'clock, in order to accommodate school boys, who attended in large numbers and carried on the work with enthusiasm. Every effort was made to induce the pupils to engage in class work, which is designed to assist in the physical development of the human body by a systematic exercise of all its parts. The intent and purpose of the work of the gymnasium at Charlesbank is body building, not the training of athletes in any special lines, although advanced or well-developed pupils are permitted to indulge in athletic work, under the direction of the instructor. The evening classes commenced at eight in the evening, and were designed to accommodate young men after business hours. These classes were well attended and were productive of much good, benefiting the young men both from a moral and a physical point of view. A public exhibition of the work of the pupils was held on July 30, at Charlesbank, before a large and appreciative audience. The work performed both in classes and athletic specialties was very good, and reflected great credit on Mr. J. W. Bowler, the instructor, under whose skilful direction such results had been attained.

The baths in connection with the gymnasium, being free to all, are a great boon to the residents of the populous neighborhood. During winter the gymnasium grounds were flooded for skating and used by thousands.

By order of your Board, the turf and tree-covered mounds were thrown open to women, and to children under fourteen years of age. Thousands of them enjoyed the privilege during the past hot summer, without doing serious harm to the trees or grass. A few shrubs were damaged, a matter of small consequence as compared with the pleasure and comfort of the little folk who enjoyed Charlesbank as never before.

A neat iron picket fence, five and one-half feet high, was erected on the east and west ends of the park and returned along the Charles-street front to the end of each gymnasium.

NORTH END BEACH.

Conforming to a change of plan, these grounds were, early last spring, graded and covered with finely screened cinders in order to form a simple playground or open space; a trench filled with loam was prepared along the street border for the planting of trees, and an iron picket fence was erected on the north line. It was deemed best by your Board to adopt this method of treatment in preference to one entailing an elaborate system of walks and planted borders, the requirements of the locality being open spaces for the recreation of its dense population.

The piers undoubtedly have been a great blessing to the neighborhood; extending over the water as they do, coolness is added to the shade found beneath their roofs. During the hot season the benches, constructed last spring, were always occupied.

During the summer the bathing-houses and beach were turned over to the care of the Bath Commission; your Superintendent received the charge again at the close of the bathing season, when an embankment or dam was thrown up along the head of the beach and the grounds behind flooded, to provide for skating.

COPP'S HILL TERRACES.

The slopes of the terraces were planted in the spring, but the shrubbery suffered severely from the gambols of the children living in the district, who swarmed over walls, copings and planted grounds, making it necessary for the department to contract for iron picket fences on walls and copings in order to confine the children to the broad, granolithic spaces intended for their gatherings. These fences are now under construction, and it is hoped they will sufficiently protect the newly planted trees from injury. Designs are now being made for two rows of fixed iron-framed benches, one row to be placed on each terrace, for the use of mothers with small children, with whom the place is very popular.

WOOD ISLAND PARK.

The construction of walks was continued at this park and completed with the exception of a section or two, which cannot be made until other work is done with which they connect. Loaming was also nearly completed and a large quantity of trees were planted last spring, and, in spite of the fact that they were almost denuded of foliage, and the

bark lacerated by a hail storm in July, they have made a fine growth and bid fair to prove that the islands of the harbor can be again covered with timber, their conditions of exposure being nearly similar to those existing at Wood Island.

An iron foot-bridge has been erected across the Revere Beach and Lynn Railroad, from the foot of Prescott street, landing on the high ground within the park. This will remove all excuse for crossing the railroad at grade, which dangerous practice has been common at the most used entrance to the park.

To meet the demand for bathing, the bathing-house on the beach was enlarged, and ninety bathing-closets built, the beach being cleared of stones and boulders, and covered with a layer of sand. The control of the establishment was then placed in the hands of the Bath Commission for the season.

The planting to be done in the spring will complete that work in this park; the ground is ready and the stock is in the nursery. The trees have been planted very thickly so as to enable them to protect each other while young; they also comprise many species, which will afford a larger variety from which to select, at thinning time, the most suitable in point of hardiness for permanent trees.

The gymnasium, under the direction of the instructor, Mr. James R. Walsh, has been well attended, two afternoons in the week being set apart for women's and girls' classes. Class work here, as at Charlesbank, has been encouraged and maintained as the legitimate work of the gymnasium. The gymnasium and ball grounds were flooded as usual during the winter, and a good season of skating was enjoyed by large crowds, numbering some days as high as 5,000.

By the completion of the walks, Wood Island was, last season, much more available and was more generally appreciated by the public, the playgrounds were in great demand for games of baseball, cricket, tennis and football, while the walks and beach were patronized by large numbers. When the trees are grown sufficiently to give shade to the grassy slopes, from which fine views are obtained of the island-dotted harbor, the full benefit to East Boston of this charming breathing space will be still more appreciated.

CHARLESTOWN HEIGHTS.

The most important work here during the past season was the construction of a sand-covered bathing beach, which, when completed, was turned over to be operated by the Bath Commission.

MARINE PARK.

On the grounds surrounding the natural history pools a liberal covering of loam was spread, amounting to about 18,000 cubic yards. Trees and shrubbery will be planted in the coming spring, and walks will be laid out. On the largest pool miniature yacht sailing will be encouraged, and a beach walk made around its shore for the accommodation of those with toy boats.

A bordering strip along Q street was loamed and planted with hardy trees and shrubs, to provide seclusion for the lawn within.

The unsightly board walk leading from Q street to the Head House was taken up, and one of cinders laid in its place.

For the gratification of the large number of people visiting Marine Park the fences were taken down and the lawns thrown open, thus giving the public an opportunity to sit on the grass and enjoy the music of the Municipal Band. No permanent damage even to young trees resulted. The turf often appeared worn, and the shrubs a little broken, but before another season the shrubs can be removed, and the spot given up to those loving simple grassy shade.

The capacity of the bathing-house was taxed on several occasions last summer, and an extension of its accommodations may be necessary the coming season, plans for which are now in preparation by the department.

The sgraffito work ornamenting the Head House became badly damaged by weather exposure, necessitating the renewal of many of the panels. This was done; the joints in the front of the building were calked and puttied, and the woodwork oiled.

The storm in November did considerable damage to the railings, seats and floor of the bridge to Castle Island. With the exception of replacing the fixed seats this damage has been repaired.

Castle Island was closed to the public last season, being used by the United States Government for defensive purposes during the war with Spain.

DORCHESTER PARK.

No work of improvement was done on this park last season, other than that of thinning out overcrowding and dead trees. Being a beautiful piece of natural, rocky, undulating woodland, intersected by winding trails, it is a favorite resort



JAMAICA PARK, SHORE OF POND AT PINE BANK.

for family picnic parties. A water-pipe was laid to the picnic shelter last spring, and a section of the boundary wall has been ordered by your Board to be built next spring.

PLAYGROUNDS.

FRANKLIN FIELD.

The portions of the boundary which were loamed and prepared in 1897, were last spring planted with trees. The large farm barn at the south-west corner of the Field was thoroughly overhauled and fitted up for a sheep-fold, where comfortable accommodations were provided for 350 sheep. A stock pasture was fenced, as were also the boundaries on the west and south sides. The farm-house was repaired and painted for the use of the shepherd, the whole forming a compact and convenient farmstead, located where it can be screened from the Field by appropriate planting. The transfer of the sheep-fold from Franklin Park to Franklin Field has removed a disfiguring blot from the slopes of Scarboro' Hill.

Five diamonds were laid out on the playground, and backstops erected at each. The grounds were flooded and prepared for skating the past winter, the ice being lighted by electric lights, and a fairly successful season was enjoyed by a large number of people. The popularity of the playground increases with each season, its forty acres of available surface, level as a table, offering fine facilities for tennis, cricket, baseball and football, as well as for other games of like character.

CHRISTOPHER GIBSON PLAYGROUND.

(Area 6 acres.)

The old "Dorchester Town Field," used for baseball and football games. The low-lying portion was flooded the past winter for skating. The requirements are filling and fencing, sanitary and shelter buildings.

NEPONSET PLAYGROUND.

(Area 18 acres.)

This playground is a salt marsh. A portion of it was underdrained last season, the old water-course winding through its centre was abandoned and partly filled up, a new ditch being excavated on one side of the playground to receive the drainage of the district. A large quantity of filling was received and spread on the drained portion, a dam

was thrown up and the surface flooded and used for skating during the winter. The development of this ground requires drainage and filling.

BILLINGS FIELD.

(Area 11 acres.)

La Grange street, West Roxbury. About 20,000 cubic yards of filling were received at this playground during the year. Probably 3,000 cubic yards more will be needed to complete the filling of the bog land, when, after being tile drained, it may serve for ball games. The low grounds were flooded last season and used for skating.

NORTH BRIGHTON PLAYGROUND.

(Area 14 acres.)

Western avenue and North Harvard street. Eleven acres of this playground is salt meadow. Three acres adjoining Western avenue have been graded, and are used as a playground. Plans are under consideration for a salt water swimming pool, on the meadow, to be supplied from the Charles river. Sanitary and shelter buildings are needed.

CHARLESTOWN PLAYGROUND.

(Area 14 acres.)

Corner Main and Alford streets. About ten acres of this playground has been filled to grade, a large portion of which has been levelled off and is in use as a ball ground. A part of these grounds was flooded and used for skating the past winter.

MYSTIC PLAYGROUND.

(Area 2 1-4 acres.)

Chelsea street and Mystic River, Charlestown. This playground has a simple cinder-covered surface. Fences, sanitary building and shelter are among the improvements needed.

FIRST-STREET PLAYGROUND.

(Area 5 acres.)

A six-lap running track is laid off at this playground, which last summer was equipped with electric lights for night work. Accommodations are provided for two base ball diamonds, and by flooding the grounds good skating was had during the winter. The requirements are sanitary and shelter buildings, and enclosure by fencing.

FELLOWS-STREET PLAYGROUND.

(Area 3-4 acres.)

During the past season this playground was graded level and covered with fine cinders, and loam borders were made for a row of trees, which will be planted next spring. A fence is much needed for the protection of children, and to prevent the ground from being used as a convenient cut-off. The fence, too, would serve to protect the newly planted trees. Other improvements contemplated comprise a row of fixed benches and a few pieces of simple apparatus for children. A sanitary building and a shelter also are among the requirements.

NORTH END PLAYGROUND.

(Area 1-4 acre.)

Prince and North Bennet streets. This new playground was created by tearing down crowded tenement buildings. Last spring it was graded and covered with finely screened cinders. It adjoins Paul Revere School, and is simply treated as an open space to permit of the free romping of the children, who crowd it frequently beyond its capacity.

THE PARKWAYS.

Between the Public Garden and Franklin Park there are 26.2 miles of driveway, over a large portion of which the traffic is heavy, and the wear and tear necessarily great. The method employed to keep these road surfaces smooth, is to first soak the roadway by continued heavy watering, and with steam rollers of seventeen tons weight, to roll the face until all projecting pieces of macadam are driven in flush with the surface. A slight sprinkling of coarse stone screenings is then applied, where needed, to fill up interstices in the macadam, and the rolling continued until a smooth, firm surface is obtained. This treatment is given from four to six times during the season, according to the individual necessities of each portion of the road. With close attention of this character, it is seldom that ruts or holes have a chance to develop, and the maintenance of a smoothly or well kept road is much less costly in proportion, than that of one roughly maintained, apart from the advantage of the much longer life of a smooth road over one that is rough or ill-kept. The absence of a cushion of loose material, too, is an advantage in point of more freedom from dust or mud.

The stunted appearance of the line trees, planted along the parkways, induced an examination of their conditions, when it was found that they were planted in a shallow strip of loam, surrounded by coarse, gravelly sand. The trees were starving for want of nutriment and moisture, and were practically worthless in their various stages of decrepitude. It was decided to renew the whole plantation throughout the Fens. First, the planting space was excavated and made much larger and deeper, then filled with good loam, and planted with Norway maples, as being a more suitable tree for the existing conditions, than the kinds they displaced. About 10,000 cubic yards of loam was used in this work. The border for trees between the Fens and Perkins street requires similar treatment, as regards the enlargement of the loam space. When this is done the work of reinforcing the line borders with loam will be finished.

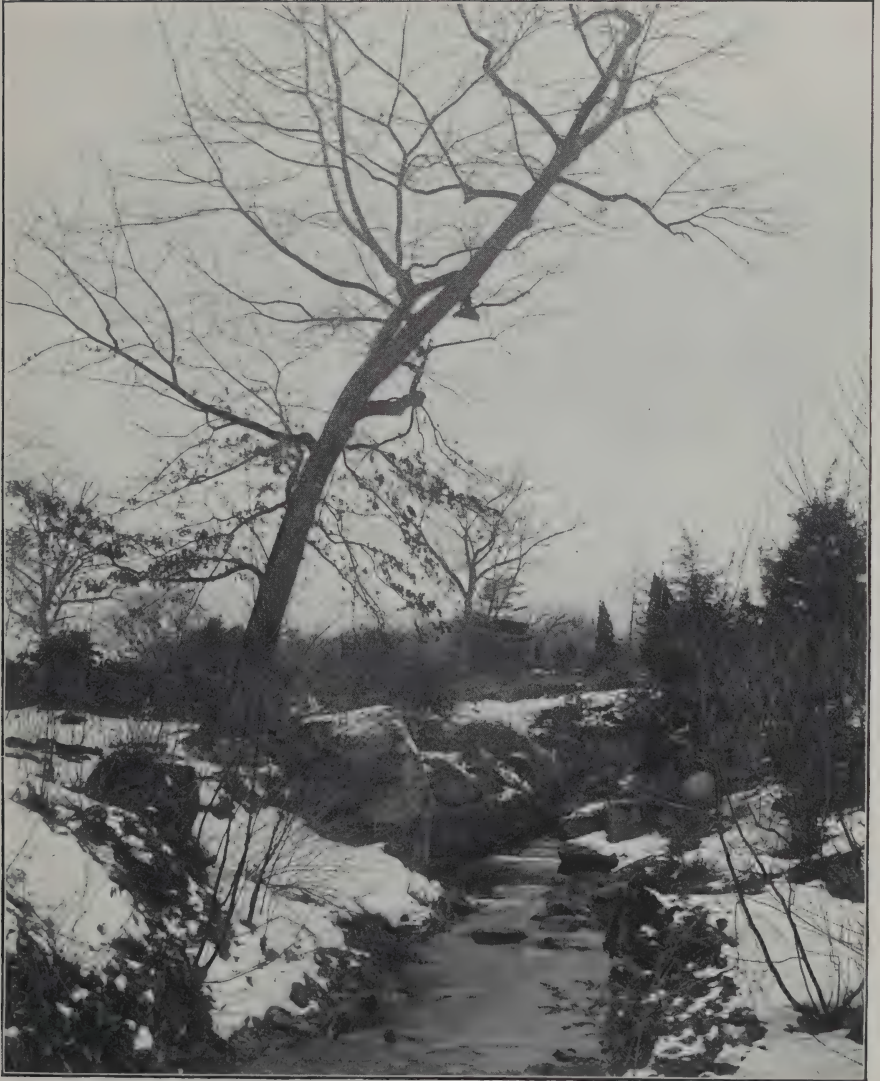
Red oaks have been planted on the borders of the parkways between Franklin Park and Huntington avenue. Many of them are small, but they are the best that could be procured.

Solid plantations of shrubbery were made in the loam spaces on the Arborway, between Pond and Centre streets, and between Franklin Park and South street.

Respectfully submitted,

J. A. PETTIGREW,

Superintendent.



THE BROOK, ARNOLD ARBORETUM.

ENGINEER'S REPORT.

MR. J. A. PETTIGREW,

Superintendent of Parks:

DEAR SIR,—I herewith submit a statement of the principal work done in the several parks (not including planting) during the year ending January 31, 1899:

COMMONWEALTH AVENUE.

Walks resurfaced (cinders) . . . 2,400 square yards.
 Curbstone reset 250 linear feet.
 A new wearing floor has been laid on Charlesgate bridge.

THE FENS.

Excavation for tree spaces . . . 8,700 cubic yards.
 Loam bought and spread on plantations, 8,700 cubic yards.
 Iron fence erected at Stony Brook bridge,
 including four double gates . . . 180 linear feet.

An automatic tide-gate for delivering into the Fens pond, at each tide, a supply of clean water, from the Charles river, has been placed in the culvert under Brookline avenue.

The Street Department has completed the Ipswich-street bridge over the Charlesgate channel, and has completed the permanent abutments and erected a temporary wooden bridge over Ipswich street at Charlesgate West.

RIVERWAY.

Longwood-avenue bridge is nearly completed. It was opened to travel December 29, 1898.

Building erected (cart shed), 1.

LEVERETT PARK.

The pumping station on Chestnut street, erected in 1875 by the Jamaica Pond Aqueduct Corporation, has been removed and its site graded.

A system of stone and pipe drains has been laid to conduct into Ward's pond the leakage from Jamaica pond.

One of the small ponds west of Ward's pond has been filled with gravel and stones, and 200 linear feet of retaining wall has been removed.

JAMAICA PARK.

Driveways surfaced (macadam)	.75 mile, 10,800 square yards.
Walks surfaced (cinders and macadam)	
.57 mile	2,700 square yards.
Gutters paved (granite block)	1,697 square yards.
Drain-pipe laid:	
12-inch	182 linear feet.
10-inch	161 linear feet.
8-inch	625 linear feet.
4-inch	1,225 linear feet.
Water-pipe laid: (2 inch)	200 linear feet.
Boundary wall built	224 linear feet.
Retaining " "	35 linear feet.
Foundation for boundary wall laid	2,650 linear feet.
Stationary seats built	257 linear feet.
Excavation for tree spaces	400 cubic yards.
Loam bought and spread on plantations, 18,000 cubic yards.	
Building erected (horse shed)	1
Drinking fountains erected	2
Catch-basins built	16

The old Perkins stable at Pine Bank and the old stone gate-house near corner of Perkins and Chestnut streets have been removed.

Manholes have been built over the underground chambers of the gate-house and the bottom of the culvert, under Perkins street has been paved. When the proposed openings in the gate chamber partitions, for controlling the height of the water in Jamaica Pond have been made, the overflow from the pond will pass through the culvert and over the cascade into Ward's Pond.

ARBORWAY.

Driveway ballasted ($\frac{1}{4}$ mile)	4,580 square yards.
Gutters repaved	178 square yards.
Boundary wall built	375 linear feet.

A new wearing floor has been laid on the bridge over Stony Brook.

The laying of the 48 inch water main through Jamaica Park and the Arborway from Perkins street to Morton street by the Metropolitan Water Board has been completed.

ARNOLD ARBORETUM AND BUSSEY PARK.

Driveway graded	0.1 mile.
Driveway surfaced (1.1 mile) . . .	14,370 square yards.
Gutters paved (cobblestone) . . .	3,522 square yards.
Drain-pipe laid (8-inch)	1,100 linear feet.
Catch-basins built	31

Gateways for the five entrances to the Arboretum north of Bussey street are completed, and iron gates for them are being constructed.

WEST ROXBURY PARKWAY.

Locations of proposed driveways cleared of trees and brush . . .	1.45 miles.
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FRANKLIN PARK.

Driveways surfaced (macadam) 0.15 mile	3,100 square yards.
Walks surfaced (cinders and macadam) 1.2 mile	7,050 square yards.
Gutters paved (granite block) . . .	126 square yards.
Curbstone set	378 linear feet.
Drain-pipe laid :	
18-inch	660 linear feet.
12-inch	202 linear feet.
10-inch	509 linear feet.
8-inch	517 linear feet.
6-inch	480 linear feet.
4-inch	171 linear feet.
1½-inch to 4-inch tile	1,884 linear feet.
Manholes built	3
Catch-basins built	4
Water-pipe laid :	
4-inch	100 linear feet.
2-inch	50 linear feet.
Drinking fountain erected	1
Iron fence built (Schoolmaster hill) . .	803 linear feet.
Foundation of boundary wall laid (Seaver street)	3,000 linear feet.
Loam bought and spread on planta- tions	72,000 cubic yards.
Building erected (stable)	1

FRANKLIN FIELD.

Wooden boundary fence built . . .	1,800 linear feet.
Electric lamp-posts erected . . .	11
Drain-pipe laid (8-inch) . . .	200 linear feet.

The Ward barn has been made into a sheep barn, and the house repaired for the use of the shepherd.

Loam bought and spread on plantation, 5,000 cubic yards.

DORCHESTER PARK.

Water-pipe laid (2-inch) . . .	400 linear feet.
Drinking fountain erected . . .	1

STRANDWAY.

Sea-wall built	1,251 linear feet.
Filling deposited in place . . .	72,000 cubic yards.
Loam spread on plantations . . .	2,950 cubic yards.
Wooden wharf built	1

The sea-wall is completed, but about 21,000 cubic yards of filling will be necessary to complete the grading back of the wall.

The Boston Yacht Club has erected its club-house and the houses of the South Boston and Mosquito Fleet Yacht Clubs are under construction.

MARINE PARK.

Walks graded and surfaced, 0.1 mile . . .	1,100 square yards.
Gutters repaved	56 square yards.
Curbstone set	161 linear feet.
Loam bought and spread on plantations	19,300 cubic yards.

WOOD ISLAND PARK.

Walks surfaced, 0.25 mile	1,630 square yards.
Drain pipe laid:	
4-inch	560 linear feet.
2-inch	50 linear feet.
Area loamed and plowed	3.3 acres.
Building erected	1
Area of bathing beach cleared of stones and covered with sand	0.5 acres.



JAMAICA POND, PINE BANK IN DISTANCE.

The foot-bridge over the Boston, Revere Beach and Lynn Railroad at Prescott street is nearly completed.

Stationary seats built. 275 linear feet.

CHARLESTOWN HEIGHTS.

Area graded and loamed 0.2 acres.

Area of bathing beach graded and covered with sand 0.86 acres.

CHARLESTOWN PLAYGROUND.

Area filled since the land was taken, in

1891 7.6 acres.

Area of mill pond not yet filled 3.2 acres.

COPP'S HILL TERRACES.

Iron fence erected 300 linear feet.

NORTH END BEACH.

Iron boundary fence erected 197 linear feet.

Area regraded and covered with cinders, ... 1.7 acres.

Electric light-posts erected 4

Electric light cable laid 485 linear feet.

Loam bought and deposited in tree spaces 774 cubic yards.

A boat-landing and ticket-office for the Park Boat Service has been provided at the men's bath-house pier.

CHARLESBANK.

Iron boundary fence erected 1,120 linear feet.

FELLOWS-STREET PLAYGROUND.

Catch-basin built 1

Drain-pipe laid (8-inch) 35 linear feet.

The whole playground has been regraded and surfaced with cinders, and a tree space ten feet wide along the boundaries has been excavated and filled with loam.

BILLINGS FIELD.

Area filled and partly graded 5.74 acres.

NEPONSET PLAYGROUND.

Area filled and partly graded	4.6 acres.
Drainage ditch excavated	1,085 linear feet.
Drain-pipe laid:	
10-inch	364 linear feet.
8-inch	600 linear feet.
2-inch tile	1,320 linear feet.
1½-inch tile	3,210 linear feet.
Catch-basins built	4
10-inch outlet gates for skating pond	2

CHRISTOPHER GIBSON PLAYGROUND.

Curbstone set	56 linear feet.
Gutters paved (cobblestone)	26 square yards.

NORTH END PLAYGROUND.

Area graded and covered with cinders, ...	0.26 acre.
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Respectfully,

C. E. PUTNAM,

Engineer.

FINANCIAL STATEMENTS.

I.

*Expenditures for Land, Construction and Maintenance from
February 1, 1898, to January 31, 1899.*

PARKS.	Page.	Land.	Construc- tion.	Mainte- nance.	Totals.
Main Park System:					
Commonwealth avenue...	24		\$3,353 45	\$12,759 86	\$16,113 31
Fens	24		18,981 75	10,509 44	29,491 19
Riverway	25		41,917 39	7,677 86	49,595 25
Leverett Park	26		5,995 95	3,258 11	9,254 06
Jamaica Park	27		57,191 62	-8,757 63	65,949 25
Arborway	29		10,580 46	4,560 30	15,140 76
Arnold Arboretum	30	\$2,525 50	44,602 60	3,772 69	50,900 79
West Roxbury Parkway ..	31		3,005 41		3,005 41
Franklin Park	31		147,145 99	30,252 11	177,398 10
Marine Park System:					
Dorchesterway	33		196 94	183 50	380 44
Strandway	33	6,485 00	80,017 17		86,452 17
Marine Park	34		22,564 05	6,681 84	29,245 89
Wood Island Park	35		17,140 93	5,020 24	22,161 17
Charlesbank	36		1,704 81	9,008 37	10,713 18
Charlestown Heights	37		5,107 60	1,950 91	7,058 51
Charlestown Playground ..	38		360 41	347 19	707 60
Dorchester Park	38		265 05	16 25	281 30
Franklin Field	38		9,256 75	2,527 29	11,784 04
Public Park, North End....	39		8,271 08	10,136 12	18,407 20
Chestnut Hill Park	41		529 17	3,866 08	4,395 25
Trinity Triangle	41			5 25	5 25
North Brighton Playground,	41		407 59	123 00	530 59
Neponset Playground	42	9,005 02	3,536 68	799 87	13,341 57
Billings Field	42	225 00	1,935 41	784 18	2,944 59
First-street Playground	43			942 52	942 52
North-End Playground	43	31,269 21		308 22	31,577 43
Mystic Playground	43			100 93	100 93
Fellows-street Playground ..	43			1,497 62	1,497 62
Christopher Gibson Play- ground	43			521 38	521 38
Parls-street Gymnasium	44			2,857 72	2,857 72
Office expenses	44			10,773 52	10,773 52
Totals	..	\$49,459 73	*\$484,068 26	\$140,000 00	\$673,527 99

* The sum of \$73.00 drawn for, but not yet paid by Auditor.

II.

*Expenditures of the Department in detail from February 1,
1898, to January 31, 1899.*

COMMONWEALTH AVENUE.

CONSTRUCTION.

Roadways, Gutters, Drainage and General Work.

Roads and walks: labor	
and materials . . .	\$2,775 69
Signs and notices . . .	63 24
Engineers and expenses . .	26 94
General work: labor and	
materials . . .	26 69
	\$2,892 56

Plantations.

Labor and expenses	459 99
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Lawns and Woods.

Materials	90
	\$3,353 45

MAINTENANCE.

Roadways, Grounds and Drainage.

Roads and walks: labor and mate-	
rials	\$9,896 87
Grounds: labor and expenses . .	1,508 88
Stable account	908 50
Bridge	211 71
Drainage	174 39
General work: materials	59 51
	12,759 86
	\$16,113 31

FENS.

CONSTRUCTION.

Plantations.

Labor and expenses	\$11,241 94
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Grading, Loam and General Work.

Loam	\$5,707 93
Engineers and expenses . .	630 98
Borings	96 70
Signs and notices	76 29
General work: labor and	
materials	57 37
Grading: labor	1 89
	6,571 16

<i>Amounts carried forward,</i>		
	\$6,571 16	\$16,113 13

Amounts brought forward, \$6,571 16 \$16,113 31

Roadways, Gutters and Drainage.

Roads and walks: labor		
and materials . . .	\$544	02
Gutters: labor . . .	80	50
Drainage: labor . . .	66	65
		691 17

Machinery, Tools and Implements.

Steam roller	391	88
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Lawns and Woods.

Labor and materials	71	10
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Boating Service.

Labor	10	00
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Water Supply.

Labor	4	50
		\$18,981 75

MAINTENANCE.

Roadways, Grounds, Buildings, Drainage and General Work.

Roads and walks: labor and materials	\$6,138	03
Grounds: labor and materials	3,265	65
Stable account	563	99
General work: labor and materials, ...	273	32
Drainage: labor and materials	144	88
Water supply	24	00
Live stock	21	39
Fence: labor	20	25
Charlesgate bridge: labor and materials	17	15
Engineers and expenses	14	75
Stony brook gate-house and bridge, ...	14	03
Buildings: labor and materials	12	00
		10,509 44
		29,491 19

RIVERWAY.

CONSTRUCTION.

Longwood Avenue Bridge.

Amount paid under contract	\$35,077	64
Town of Brookline: engineers and expenses	3,337	01
		\$38,414 65

Plantations.

Labor and expenses	1,857	42
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Amounts carried forward,	\$40,272 07	\$45,604 50
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Amounts brought forward, \$40,272 07 \$45,604 50

Grading, Loam and General Work.

General work: labor and materials	\$404 85	
Engineers and expenses	105 81	
Grading: labor and materials	105 53	
Signs and notices: labor, ...	60 19	
Loam: labor and materials	15 01	
		691 39

Administration Building.

Stable sheds: labor and materials	\$452 68	
Building: materials	17 74	
		470 42

Roadways, Gutters and Drainage.

Gutters: labor and materials	\$228 81	
Roads and walks: labor and materials	181 00	
Drainage: labor and materials	22 50	
		432 31

Muddy River Gate-House.

Labor and materials	46 85	
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Lawns and Woods.

Materials	4 35	
		41,917 39

MAINTENANCE.

Roadways, Grounds, Buildings and Drainage.

Roads and walks: labor and materials	\$2,748 08	
Grounds: labor and materials	2,227 64	
Buildings: labor and materials	1,709 84	
Stable account: supplies	638 74	
General work: labor and materials	284 24	
Drainage: labor and materials	50 47	
Bridges: labor and materials	8 10	
Engineers and expenses	6 50	
Water supply	4 25	
		7,677 86
		49,595 25

LEVERETT PARK.

CONSTRUCTION.

Plantations.

Labor and expenses	\$3,449 32	
<i>Amounts carried forward,</i>	\$3,449 32	\$95,199 75

PARK DEPARTMENT.

27

Amounts brought forward, \$3,449 32 \$95,199 75

Lawns and Woods.

Labor and materials 794 68

Grading, Loam and General Work.

Grading: labor and materials	\$541 16	
Signs and notices	57 84	
Loam	50 23	
Engineers and expenses	37 10	
General work: labor and materials	15 51	
		701 84

Roadways, Gutters and Drainage.

Roads and walks: labor and materials	\$375 68	
Drainage: labor and materials	278 29	
		653 97

Walls.

Labor 382 88

Water Supply.

Water pipes and labor 11 75

Plans and Designs.

Landscape architects and expenses	1 51	
		\$5,995 95

MAINTENANCE.

Roadways, Grounds, Buildings, Drainage and General Work.

Roads and walks: labor and materials	\$1,736 17	
Grounds: labor and materials	1,190 27	
Buildings: labor and materials	139 23	
Drainage: labor and materials	85 23	
Stable account: supplies	63 46	
General work: materials	40 50	
Engineers and expenses	3 25	
		3,258 11
		9,254 06

JAMAICA PARK.

CONSTRUCTION.

Grading, Loam and General Work.

Loam	\$13,172 74	
Grading: labor and materials	6,414 37	
General work: labor and materials	3,027 64	
Engineers and expenses	627 44	
Signs and notices	67 24	
		\$23,309 43

<i>Amounts carried forward,</i>	\$23,309 43	\$104,453 81
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Amounts brought forward, \$23,309 43 \$104,453 81

Roadways, Gutters and Drainage.

Roads and walks: labor and materials . . .	\$19,209 71	
Drainage: labor and materials . . .	2,074 66	
Gutters: labor and materials . . .	700 70	
		21,985 07

Plantations.

Labor and expenses	3,607 75
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Electric Lighting.

Amount paid under contract . . .	3,274 95
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Retaining Walls.

Labor and materials	1,928 59
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Lawns and Woods.

Labor and materials	1,100 70
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Culvert.

Amount paid under contract . . .	475 00
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Boating Service.

Labor and materials	429 99
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Horse Sheds.

Labor	414 69
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Settees.

Labor and materials	322 17
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Water Supply.

Water pipes and labor	216 07
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Fountains.

Fountains	100 00
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Pine Bank House.

Labor	23 60
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Plans and Designs.

Landscape architects and expenses . . .	3 61	
		\$57,191 62

MAINTENANCE.

Roadways, Grounds, Buildings, Drainage and General Work.

Grounds: labor and materials . . .	\$2,635 65
Roads and walks: labor and materials . . .	2,622 91
Buildings: labor and materials . . .	1,788 11

<i>Amounts carried forward,</i>	\$7,046 67	\$57,191 62	\$104,453 81
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<i>Amounts brought forward,</i>	\$7,046 67	\$57,191 62	\$104,453 81
Skating: labor and materials . . .	673 47		
Stable account: supplies . . .	489 30		
Drainage: labor and materials . . .	336 89		
General work: labor and materials .	195 50		
Live stock	6 00		
Signs and notices	5 05		
Water supply	2 50		
Fence	2 25		
		8,757 63	
			65,949 25

ARBORWAY.

CONSTRUCTION.

Plantations.

Labor and expenses \$4,124 51

Roadways, Gutters and Drainage.

Roads and walks: labor and materials . . .	\$2,234 38	
Gutters, labor and materials . . .	237 75	
Drainage: labor and materials . . .	109 44	
		2,581 57

Walls.

Amount paid under contract	\$1,252 00
Labor and materials	568 05
	1,820 05

Grading, Loam and General Work.

Loam	\$305 04
Engineers and expenses . . .	254 87
Signs and notices	57 84
General work: labor and materials	52 29
Grading: labor and materials	28 14
	698 18

Lawns and Woods.

Labor and materials 441 78

Electric Lighting.

Lamp-posts and cable 422 50

Machinery, Tools and Implements.

Steam roller 391 87

Plans and Designs.

Landscape architects and expenses	100 00	
		\$10,580 46
<i>Amounts carried forward,</i>		\$170,403 06

Amounts brought forward,

\$10,580 46 \$170,403 06

MAINTENANCE.

Roadways, Grounds, Drainage and General Work.

Roads and walks: labor and materials	\$3,057 39	
Grounds: labor and materials	666 82	
Stable account: supplies	639 30	
Stony-brook bridge: labor and materials	89 56	
Drainage: labor and materials	71 23	
General work: labor and materials,	36 00	
		4,560 30
		15,140 76

ARNOLD ARBORETUM AND BUSSEY PARK.

LAND.

Amount paid for land \$2,525 50

CONSTRUCTION.

Roadways, Gutters and Drainage.

Roads and walks: labor and materials	\$36,116 84
Drainage: labor and materials	1,817 55
Gutters, labor and materials	1,324 48
	\$39,258 87

Grading, Loam and General Work.

Grading: materials	\$1,716 71
General work: labor and materials	1,061 82
Engineers and expenses	429 20
Signs and notices	213 62
	3,421 35

Boundary Walls and Gateways.

Iron gates: amount paid under contract	\$1,500 00
Walls: labor	16 00
	1,516 00

Machinery, Tools and Implements.

Watering cart	335 35
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Lawns and Woods.

Labor	60 50
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Plantations.

Labor and expenses	5 00
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Plans and Designs.

Landscape architects and expenses	3 25
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Water Supply.

Labor	2 28
	44,602 60

Amounts carried forward,

\$47,128 10 \$185,543 82

Amounts brought forward, \$47,128 10 \$185,543 82

MAINTENANCE.

Roadways, Grounds, Drainage and General Work.

Roads and walks: labor and materials	\$3,096 95	
Stable account: supplies	489 30	
Grounds: labor and materials	116 69	
General work	38 75	
Drainage: labor	31 00	
		3,772 69
		50,900 79

WEST ROXBURY PARKWAY.

CONSTRUCTION.

Lawns and Woods.

Labor \$1,906 83

Grading and General Work.

Engineers and expenses	\$416 15	
Signs and notices	81 68	
General work, labor and materials	46 59	
		544 42

Roadways, Gutters and Drainage.

Roads and walks: labor and materials . . . 340 61

Plantations.

Labor and expenses 202 72

Plans and Designs.

Landscape architects and expenses	10 83	
		3,005 41

FRANKLIN PARK.

CONSTRUCTION.

Grading, Loam, Drainage and General Work.

Loam	\$47,863 91	
Grading: labor and materials	31,056 41	
Drainage: labor and materials	5,789 24	
General work: labor and materials	5,748 44	
Engineers and expenses	1,347 24	
Signs and notices	225 38	
		\$92,030 62

Plantations.

Labor and expenses 26,009 34

Roadways and Gutters.

Roads and walks: labor and materials	\$10,959 11	
Gutters: labor and materials	225 21	
		11,184 32

Amounts carried forward, \$129,224 28 \$239,450 02

Amounts brought forward, \$129,224 28 \$239,450 02

Lawns and Woods.

Labor and materials 4,733 49

Park Wall and Gateways.

Labor and materials 3,441 90

Stable.

Amount paid under con-
tract \$2,088 45
Labor and materials . . . 824 23

2,912 68

Refectory Building.

Hartwell, Richardson &
Driver, for plans and
superintendence . . . \$1,195 91
Public Buildings Depart-
ment, Electrical Con-
struction Division . . . 934 47
J. J. Flynn, materials . . . 670 41

2,800 79

Fences.

Schoolmaster's Hill:
Amount paid under con-
tract \$1,095 00
Labor and materials . . . 116 25
Refectory Hill fence: ma-
terials 111 55

1,322 80

Carriage Sheds.

Hartwell, Richardson &
Driver, plans and super-
intendence \$864 00
Public Buildings Depart-
ment, Electrical Con-
struction Division . . . 439 35

1,303 35

Machinery, Tools and Implements.

Steam-roller 783 75

Water Supply.

Water-pipes and labor 318 10

Temporary Buildings.

Labor and materials 206 52

Fountains.

Water fountain 60 00

Duck House.

Materials 13 92

Amounts carried forward, \$147,121 58 \$239,450 02

Amounts brought forward, \$147,121 58 \$239,450 02

Boating Service.

Labor and materials 13 15

Plans and Designs.

Landscape architects and expenses, 9 01

Settees.

Materials 2 25
 ————— \$147,145 99

MAINTENANCE.

Roadways, Grounds, Buildings, Drainage and General Work.

Roads and walks: labor and materials	\$11,380 35	
Grounds	7,500 09	
Buildings: labor and materials	5,675 85	
Stable account: equipments and supplies	3,019 18	
Sheep-fold	1,241 43	
General work	986 69	
Live stock	387 06	
Drainage	50 96	
Water supply: labor	6 50	
Fence: labor	4 00	
	30,252 11	
		177,398 10

DORCHESTERWAY.

CONSTRUCTION.

Grading, Loam and General Work.

Grading: labor	\$168 00
Signs and notices	28 94
	————— \$196 94

MAINTENANCE.

Roadways, Grounds, and Drainage.

Roads and walks: labor	\$171 50	
Grounds: labor	12 00	
	————— 183 50	
		380 44

STRANDWAY.

LAND.

Amount paid for land	\$6,100 00
Expenses	335 00
	————— \$6,435 00

CONSTRUCTION.

Sea-wall and Grading.

Amount paid under contract	\$40,550 70
Amount paid under contract: coping	3,397 66
	————— 43,948 36

Amounts carried forward, \$43,948 36 \$6,435 00 \$417,228 56

Amounts brought forward, \$43,948 36 \$6,435 00 \$417,228 56

Filling.

Amount paid under con-		
tract . . .	\$24,321 09	
Material . . .	40 00	
Advertising contract .	6 00	
		24,367 09

Grading, Loam and General Work.

Engineers and expenses .	\$5,192 02	
General work: labor and		
materials . . .	299 75	
Loam	120 00	
Signs and notices . .	89 09	
Grading: labor and mate-		
rials	2 45	
		5,703 31

Public Landing.

Amount paid under con-		
tract	\$5,224 00	
Advertising contract .	172 62	
Materials	120 42	
		5,517 04

Plans and Designs.

Landscape architects and expenses .	350 87
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Drainage.

N-street sewer: materials . . .	130 50	
		80,017 17
		86,452 17

MARINE PARK.

CONSTRUCTION.

Head-House.

Labor and materials	\$77 85
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Grading, Loam and General Work.

Loam: amount paid		
under contract . . .	\$17,896 44	
Grading: labor and ma-		
terials	1,935 57	
General work: labor and		
materials	567 07	
Loam	551 19	
Engineers and expenses .	37 98	
Signs and notices . . .	35 25	
		21,023 50

Roadways, Gutters and Drainage.

Roads and walks: labor		
and materials . . .	\$918 41	
Gutters: labor . . .	111 94	
		1,030 35

<i>Amounts carried forward,</i>	\$22,131 70	\$503,680 73
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35

	<i>Plantations.</i>	
Labor and expenses	379	40
	<i>Boating Service.</i>	
Labor and materials	27	90
	<i>Lawns and Woods.</i>	
Labor and materials	11	00
	<i>Filling.</i>	
Filling	8	26
		\$22,558 26

	<i>Plantations.</i>	
Labor and expenses		5 79
		\$22,564 05

<i>Roadways, Grounds, Walks, Buildings, Drainage and General Work.</i>		
Grounds: labor and expenses . . .	\$3,082	06
Buildings: labor and expenses . . .	2,295	75
Roads and walks: labor and materials	1,140	73
General work: labor and materials	122	27
Castle Island bridge	24	20
Skating: labor	9	21
Boating service: labor	7	62
	6,681	84
		29,245 88

Public Buildings Department, Repair Division .	\$3,869 56	
Public Buildings Department, Electrical Construction Division .	2,773 97	
Labor	32 00	
		\$6,675 53

Grading: labor and materials	\$4,521 16	
General work: labor and materials	488 71	
Engineers and expenses	259 25	
Signs and notices	21 15	
		5,290 27

Amounts carried forward,	\$14,566 90	\$582,926 62
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Amounts brought forward, \$14,566 90 \$532,926 62

Roadways, Gutters and Drainage.

Roads and walks: labor		
and materials	\$1,188	46
Drainage: labor and ma-		
terials	644	75
		1,833 21

Settees.

Labor and materials	404	05
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Plans and Designs.

Landscape architects and expenses	200	00
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Lawns and Woods.

Labor and materials	72	42
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Electric Lighting.

Electric lights	47	30
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Tool-house.

Labor and materials	17	05
		\$17,140 93

MAINTENANCE.

Roadways, Grounds, Buildings, Drainage and General Work.

Men's gymnasium—

Grounds, apparatus and building:			
labor and expenses	\$4,100	02	
Skating: labor and expenses	500	87	
Grounds: labor and expenses	175	95	
General work	130	71	
Roads and walks: labor and mate-			
rials	79	64	
Drainage: labor and materials	17	55	
Women's bath-house: labor and ex-			
penses	15	50	
		5,020	24
			22,161 17

CHARLESBANK.

CONSTRUCTION.

Iron Fence.

Amount paid under contract	\$1,280	00
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Grading, Loam and General Work.

General work: labor	\$109	87
Signs and notices	98	70
Grading: labor	92	94
Engineers and expenses	34	36
Loam	4	56
		340 43

Walks and Drainage.

Walks: labor	84	38
		1,704 81
<i>Amounts carried forward,</i>		\$1,704 81
		\$555,087 79

Amounts brought forward, \$1,704 81 \$555,087 79

MAINTENANCE.

Grounds, Walks, Buildings and General Work.

Men's gymnasium—		
Grounds, apparatus and building:		
labor and expenses	\$3,594 63	
Women's gymnasium—		
Grounds, apparatus and building:		
labor and expenses	2,895 84	
Grounds and walks: labor and ex-		
penses	2,171 86	
Skating: labor and expenses . .	191 19	
General work: labor and expenses .	118 82	
Drainage: labor and materials . .	33 78	
Water supply: labor	2 25	
	9,008 37	
		10,713 18

CHARLESTOWN HEIGHTS.

CONSTRUCTION.

Grading, Loam and General Work.

Grading: amount paid	
under contract	\$3,170 55
Grading: labor	1,103 55
Loam	425 00
Engineers and expenses	96 96
General work: labor	25 75
Signs and notices	18 80
	\$4,840 61

Plans and Designs.

Landscape architects and expenses .	100 00
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Plantations.

Labor and expenses	79 95
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Lawns and Woods.

Labor and materials	59 57
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Walks, Gutters and Drainage.

Walks: labor	\$23 47	
Gutters: labor	4 00	
	27 47	
		\$5,107 60

MAINTENANCE.

Grounds, Walks, Buildings, Drainage and General Work.

Grounds and walks: labor and mate-		
rials	\$1,142 01	
Buildings: labor and materials . .	655 42	
Walks: labor	147 54	
Drainage: labor	5 25	
General work: labor	69	
	1,950 91	
		7,058 51

Amount carried forward, \$572,859 48

Amount brought forward,

\$572,859 48

CHARLESTOWN PLAYGROUND.

CONSTRUCTION.

Grading, Loam and General Work.

Grading: labor and materials . . .	\$271 36	
General work: labor	60 00	
Signs and notices	18 80	
Engineers and expenses	10 25	
		\$360 41

MAINTENANCE.

Grounds, Walks and Buildings.

Skating	\$334 08	
Grounds and walks: labor	13 11	
		347 19
		707 60

DORCHESTER PARK.

CONSTRUCTION.

Grading, Loam and General Work.

General work: labor	\$84 55	
Signs and notices	23 50	
General work: labor	4 03	
Engineers and expenses	2 00	
		\$114 08

Water Supply.

Water pipes and labor	105 53	
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Lawns and Woods.

Labor	37 00	
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Walks and Drainage.

Drainage: labor	4 48	
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Plans and Designs.

Landscape architects and expenses	3 96	
		\$265 05

MAINTENANCE.

Grounds, Walks and Buildings.

Grounds: labor	\$10 00	
Buildings: materials	6 25	
		16 25
		281 30

FRANKLIN FIELD.

CONSTRUCTION.

Buildings.

Sheep barn: labor and materials	\$4,035 56	
Sanitary buildings: labor and materials	5 15	
		\$4,040 71

Amounts carried forward,

\$4,040 71

\$573,848 38

Amounts brought forward, \$4,040 71 \$573,848 38

Grading, Loam and General Work.

Loam: material . . .	\$3,320 97	
Grading: labor . . .	119 33	
General work: labor and materials . . .	117 03	
Engineers and expenses . . .	109 61	
Signs and notices . . .	23 50	
		3,690 44

Plantations.

Labor and expenses	863 58
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Structures.

Fence: labor and materials	\$438 77	
Flagstaff: labor	40 00	
		478 77

Walks, Gutters and Drainage.

Drainage: labor	\$73 25	
Gutters: labor	49 25	
Walks: labor	26 00	
		148 50

Lawns and Woods.

Labor	34 75	
		9,256 75

MAINTENANCE.

Grounds, Walks, Buildings, Drainage and General Work.

Skating: labor and expenses	\$1,052 73	
Grounds and walks: labor and materials	593 42	
Sheep-fold: labor and materials	436 95	
Buildings: labor	432 84	
General work: labor and materials	5 35	
Fence: labor	4 00	
Drainage: labor	2 00	
		2,527 29
		11,784 04

PUBLIC PARK, NORTH END.

NORTH END BEACH.

CONSTRUCTION.

Grading, Loam and General Work.

Grading: amount paid under contract	\$2,118 52	
Loam: materials	942 10	
Engineers and expenses	177 25	
General work	49 05	
Signs and notices	18 80	
		\$3,305 72

Amounts carried forward, \$3,305 72 \$585,632 42

Amounts brought forward, \$3,305 72 \$585,632 42

Administration Building and Bathing Establishment.

Electric wiring . . .	\$1,406 22	
Men's bath-house: labor and materials . . .	309 18	
Women's bath-house: materials . . .	81 77	
		1,797 17

Filling.

Material	1,302 04
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Boating Service.

Labor and materials	578 32
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Piers.

Labor and materials	268 31
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Electric Lighting.

Lamp-posts and cable	181 25
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Plans and Designs.

Landscape architects and expenses	100 00	
		\$7,532 81

COPP'S HILL TERRACES.

Electric Lighting.

Lamp-posts and cable	\$245 25
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Plantations.

Labor and expense	405 00
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Walls, Grading, Drainage and General Work.

Walls: material	\$28 00	
Engineers and expenses	27 00	
Signs and notices	19 25	
Grading: labor	13 77	
		88 02
		738 27
		\$8,271 08

MAINTENANCE.

Grounds, Walks, Buildings, Drainage and General Work.

Men's bath-house: labor and materials, Administration Building and bath-house: labor and materials	\$5,931 99	
Grounds: labor and materials	353 51	
Skating	239 77	
Walks: labor	31 50	
Walls: labor	18 15	
Grading: labor	8 27	
		10,136 12
		18,407 20
Amount carried forward,		\$604,039 62

Amount brought forward,

\$604,039 62

CHESTNUT HILL PARK.

CONSTRUCTION.

Plantations.

Labor and expenses \$359 01

Grading, Loam and General Work.

Grading: labor 128 64

Fence.

Labor and materials 31 74

Roadways, Gutters and Drainage.

Roads and Walks: labor 7 75

Lawns and Woods.

Materials 2 03

\$529 17

MAINTENANCE.

Roadways, Grounds, Buildings, Drainage and General Work.

Grounds: labor and materials . . \$2,457 48

Roads and Walks: labor and materials 1,144 21

General Work: labor 183 74

Buildings: labor and materials 35 65

Fence: labor 31 00

Engineers and expenses 14 00

3,866 08

4,395 25

TRINITY TRIANGLE.

MAINTENANCE.

Grounds.

Labor 5 25

NORTH BRIGHTON PLAYGROUND.

CONSTRUCTION.

Filling.

Filling \$239 33

Grading, Loam and General Work.

Grading: labor and materials \$93 76

Engineers and expenses 20 50

114 26

Walks, Gutters and Drainage.

Walks: materials 54 00

\$407 59

MAINTENANCE.

Grounds, Drainage and General Work.

Grounds: labor \$117 00

Engineers and expenses 6 00

123 00

530 59

Amount carried forward,

\$608,970 71

Amount brought forward,

\$608,970 71

NEPONSET PLAYGROUND.

LAND.

Amount paid for land	\$8,930 02	
Expenses	75 00	
		\$9,005 02

CONSTRUCTION.

Drainage.

Labor and materials	\$2,544 76
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Grading, Loam and General Work.

Grading: labor and materials	\$580 16	
Engineers and expenses, ...	152 55	
		732 71

Plans and Designs.

Landscape architects and expenses	239 21
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Footbridge.

Labor and materials	20 00	
		3,536 68

MAINTENANCE.

Grounds and Walks.

Skating: labor and materials	\$454 34	
Grounds: labor	232 50	
Drainage: labor	58 60	
Grading: labor and materials	36 22	
Engineers and expenses	16 25	
General work: labor	1 96	
		799 87
		13,341 57

BILLINGS FIELD.

LAND.

Expenses	\$225 00
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CONSTRUCTION.

Filling.

Material	\$1,600 00
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Plans and Designs.

Landscape architects and expenses	239 37
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Grading, Loam and General Work.

Engineers and expenses	96 04	
		1,935 41

MAINTENANCE.

Grounds and Walks.

Skating: labor and materials	\$761 11	
Engineers and expenses	12 85	
Walks: labor	10 22	
		784 18
		2,944 59

Amount carried forward,

\$625,256 87

Amount brought forward,

\$625,256 87

FIRST-STREET PLAYGROUND.

MAINTENANCE.

Grounds, Walks, Drainage and General Work.

Skating: labor and expenses	\$442 71
Grounds: labor and materials	349 52
Electric light posts	102 00
Walks: labor and materials	18 06
Engineers and expenses	11 00
Filling	10 65
Drainage: labor	5 58
Plantations: labor	3 00

942 52

NORTH-END PLAYGROUND.

LAND.

Amount paid for land	\$30,929 21
Expenses	340 00
	\$31,269 21

MAINTENANCE.

Grounds and Walks.

Grading: labor	\$182 39
Grounds: labor	125 83
	308 22

31,577 43

MYSTIC PLAYGROUND.

MAINTENANCE.

Grounds and Walks.

Grounds: labor and material	\$86 61
Walks: labor and materials	8 43
Skating	5 89

100 93

FELLOWS-STREET PLAYGROUND.

MAINTENANCE.

Grounds, Walks, Drainage and General Work.

Grounds: grading and filling	\$1,437 62
Drainage: labor and materials	34 52
Walks: labor and materials	16 48
Engineers and expenses	7 00
General work: labor	2 00

1,497 62

CHRISTOPHER GIBSON PLAYGROUND.

MAINTENANCE.

Grounds, Walks, Drainage and General Work.

Grounds: grading and materials	\$448 41
Skating	64 72
Engineers and expenses	8 25

521 38

Amount carried forward,

\$659,896 75

Amount brought forward,

\$659,896 75

PARIS-STREET GYMNASIUM.

MAINTENANCE.

Labor and expenses	2,857 72
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OFFICE EXPENSES.

MAINTENANCE.

Salaries	\$8,741 20	
Telephones and expenses	591 52	
Printing	577 95	
Carriage-hire	356 50	
Expenses of legislative committee visiting park system	247 15	
Stationery	133 19	
Furniture and fixtures	120 00	
Advertising	6 01	
		10,773 52
		<u>\$673,527 99</u>

III.

General Exhibit of Appropriations, 1898-99.

OBJECTS OF APPROPRIATION.	Page.	Balances January 31, 1898.	Appropriations and Transfers, 1898-99.	Total Credits.	Expenditures 1898-99.	Balances January 31, 1899.
Public Parks, Land and Construction	46	\$49,219 56	\$500,000 00	\$549,219 56	\$400,786 00	\$148,436 56
Strandway, from Marine Park, west	46	32,782 06	.....	32,782 06	86,363 08	6,419 98
North Brighton Playground	46	407 59	.....	407 59	407 59	4,296 48
Neponset Playground, Land	46	13,301 50	.....	13,301 50	9,005 02	4,296 48
Neponset Playground, Construction	47	3,536 68	.....	3,536 68	3,536 68	19,356 25
Billings Field, Land	47	19,381 25	.....	19,381 25	225 00	546 09
Billings Field, Construction	47	2,481 50	.....	2,481 50	1,335 41	546 09
North End Playground	47	771 05	.....	31,269 21	31,269 21	3,500 00
Gymnasium, Ward 10.	47	.....	30,498 16	3,500 00	140,000 00	3,500 00
Park Department, Maintenance....	47	.....	135,000 00 } 5,000 00 }	140,000 00	140,000 00	3,500 00
		\$182,075 19	\$673,996 16	\$856,073 35	\$673,527 99	\$182,545 36

IV.

Appropriations and Balances in Detail for the Financial Year 1898-1899.

PUBLIC PARKS.

Balance unexpended January 31, 1898	\$49,212 56
Loan issued April 1, 1898	50,000 00
Loan issued November 15, 1898	450,000 00
	<u>\$549,212 56</u>

Expenditures.

Commonwealth Avenue	\$3,353 45
Fens	18,981 75
Riverway	41,917 39
Leverett Park	5,995 95
Jamaica Park	57,191 62
Arboreway	10,580 46
Arnold Arboretum and Bussey Park	47,128 10
West Roxbury Parkway	3,005 41
Franklin Park	147,145 99
Dorchesterway	196 94
Strandway	89 09
Marine Park	22,564 05
Wood Island Park	17,140 93
Charlesbank	1,704 81
Charlestown Heights	5,107 60
Charlestown Playground	360 41
Dorchester Park	265 05
Franklin Field	9,256 75
North End Park, ...	8,271 08
Chestnut Hill Park	529 17
Balance unexpended January 1, 1899	148,426 56
	<u>\$549,212 56</u>

STRANDWAY FROM MARINE PARK, WEST.

Balance unexpended January 31, 1898	<u>\$92,783 06</u>
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Expenditures.

Paid on account of construction	\$79,928 08
Paid on account of land	6,435 00
Balance unexpended January 31, 1899	6,419 98
	<u>\$92,783 06</u>

NORTH BRIGHTON PLAYGROUND.

Balance unexpended January 31, 1898	<u>\$407 59</u>
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Expenditures.

Paid on account of construction	<u>\$407 59</u>
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NEPONSET PLAYGROUND.

Balance unexpended January 31, 1898	<u>\$16,838 18</u>
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Expenditures.

Paid on account of land	\$9,005 02	
Paid on account of construction	3,536 68	
Balance unexpended January 31, 1899	4,296 48	
		<u>\$16,838 18</u>

BILLINGS FIELD, WEST ROXBURY.

Balance unexpended January 31, 1898	\$22,062 75
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Expenditures.

Paid on account of land	\$225 00	
Paid on account of construction	1,935 41	
Balance unexpended January 31, 1899	19,902 34	
		<u>\$22,062 75</u>

NORTH END PLAYGROUND.

Balance unexpended January 31, 1898	\$771 05	
Amount transferred by City Auditor to meet Execution of Court	30,498 16	
		<u>\$31,269 21</u>

Expenditures.

Paid on account of land	\$30,929 21	
Expenses	340 00	
		<u>\$31,269 21</u>

GYMNASIUM, WARD 10.

Amount appropriated under loan ordered by City Council, October 1, 1897	\$3,500 00
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Expenditures.

Balance unexpended January 31, 1899	<u>\$3,500 00</u>
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PARK DEPARTMENT.

MAINTENANCE.

Appropriation for financial year 1898-99	\$135,000 00	
Amount contributed by abutters, Common- wealth avenue	5,000 00	
		<u>\$140,000 00</u>

Expenditures.

Paid on account of maintenance as per Exhibit, page 23	<u>\$140,000 00</u>
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INCOME.

Receipts.

Received from rents, bathing fees, sale of buildings, wool, sheep, grass and wood	<u>\$2,367 57</u>
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Payments.

Income carried to General City Income	\$2,091 44	
Balance on hand January 31, 1899	276 13	
		<u>\$2,367 57</u>

V.

*Summary of Expenditures on Account of Park Construction
from the Organization of the Board, October 8, 1875, to
January 31, 1899.*

MAIN PARK SYSTEM.

COMMONWEALTH AVENUE.

Roadways, sidewalks, gutters, drainage and general work	\$86,805 01	
Plantations	10,712 41	
Electric lighting	5,674 00	
Machinery, tools, etc.	884 90	
Plans and designs	22 90	
		\$104,099 22

FENS.

Filling	\$576,811 15	
Excavating, lawns and woods, grading, loam and general work	542,358 90	
Roadways, sidewalks, gutters and drainage	349,992 66	
Retaining walls, curb and fence	118,177 77	
Boylston bridge	92,011 43	
Plantations	83,543 01	
Charlesgate bridge	65,287 67	
Agassiz bridge	52,013 50	
Stony-brook bridge	40,007 11	
Railroad bridge	39,995 04	
Fen bridge	29,427 80	
Plans, designs and superintendence	27,280 28	
Machinery, tools, etc.	14,188 99	
Office and general expenses	14,114 92	
Electric lighting	6,887 23	
Surveying	5,472 16	
Stony-brook channel and gate-house	1,976 28	
Water supplies, settees and live stock	1,421 98	
Duck-house	350 00	
Boating service	306 04	
		2,061,623 92

RIVERWAY.

Excavating, lawns and woods, grading, loam and general work	\$187,125 43	
Filling	104,143 90	
Roadways, sidewalks, gutters and drainage	97,027 54	
Longwood-avenue bridge	56,359 22	
Audubon bridge	39,654 27	
Bridle-path bridge	32,929 09	
Administration building	27,005 12	
Plantations	18,239 07	
Footbridges and culverts	14,345 00	
Tremont-street bridge	13,273 53	
Brookline-avenue bridge	8,936 82	
Bellevue-street bridge	8,163 96	
Retaining-wall	7,568 09	
		\$614,771 04

Amounts carried forward,

\$2,165,723 14

<i>Amounts brought forward,</i>	\$614,771 04	\$2,165,723 14
Surveys, plans, designs and superintendence .	7,196 67	
Shelter	4,513 65	
Electric lighting	2,734 57	
Water-supply and settees	2,176 71	
Machinery, tools, etc.	468 75	
Boating-service	181 21	
Gate-house	105 15	
		632,147 75

LEVERETT PARK.

Excavating, lawns and woods, grading, loam and general work	\$186,810 27	
Roadways, sidewalks, gutters and drainage .	78,447 69	
Retaining-walls, steps and culverts	35,247 89	
Plantations	33,787 26	
Leverett-pond bridge	9,850 50	
Plans and designs	7,178 75	
Footbridges and culverts	6,368 46	
Electric lighting	5,278 74	
Machinery, tools, etc.	3,497 93	
Water-supply, fountains and settees	1,880 84	
Boating-service	97 24	
Filling	15 75	
Iron railing	1 25	
		368,462 66

JAMAICA PARK.

Lawns and woods, grading grounds, loam and general work	\$97,266 02	
Roadways, sidewalks, gutters and drainage .	60,772 36	
Pine Bank House and horse-sheds	32,527 15	
Retaining-walls and steps	22,605 49	
Plantations	9,437 20	
Water-supply, fountain, and settees	6,695 18	
Electric lighting	4,897 45	
Surveys, plans, designs and superintendence .	3,189 68	
Machinery, tools, etc.	2,669 62	
Boating-service	1,353 91	
Iron fence	1,162 38	
Culverts	475 00	
Gate-house	80 73	
		243,132 17

ARBORWAY.

Roadways, sidewalks, gutters and drainage .	\$166,984 27	
Lawns and woods, grading grounds, loam and general work	86,162 62	
Arches	64,631 57	
Water-supply and settees	10,256 85	
Plantations	10,153 66	
Culverts	5,489 53	
Walls	5,055 08	
Stony-brook bridge	4,503 43	
Electric lighting	3,450 50	
Filling	2,819 16	
Machinery, tools, etc.	2,360 62	
Plans and designs	281 94	
		362,149 23
<i>Amount carried forward,</i>		\$3,771,614 95

Amount brought forward,

\$3,771,614 95

ARNOLD ARBORETUM AND BUSSEY PARK.

Roadways, sidewalks, gutters and drainage .	\$276,166 74	
Lawns and woods, grading and general work .	18,215 31	
Boundary walls and gateways .	16,249 56	
Machinery, tools, etc. .	3,607 23	
Plans, designs and superintendence .	1,652 47	
Plantations .	744 41	
Water-supply and settees .	166 39	
Surveying .	100 00	
		316,902 11

WEST ROXBURY PARKWAY.

Lawns and woods, grading grounds, loam and general work .	\$8,002 49	
Plantations .	1,359 68	
Plans, designs and superintendence .	560 85	
Roadways, gutters and drainage .	340 61	
		10,263 63

FRANKLIN PARK.

Roadways, sidewalks and gutters .	\$695,044 32	
Lawns and woods, grading grounds, drainage and general work .	587,296 59	
Plantations .	157,286 28	
Refectory building .	108,571 75	
Seaver-street improvement .	84,817 75	
Shelter and Overlook .	60,561 54	
Forest Hills bridge .	52,972 17	
Scarboro' Pond .	40,943 11	
Park wall and gateways .	35,365 80	
Arbor, Schoolmaster's hill .	29,514 11	
Plans, designs and superintendence .	28,343 95	
Reservoir .	27,634 39	
Scarboro' Pond bridges .	26,703 10	
Water-supply, fountains and settees .	25,260 30	
Ellicott Arch .	16,732 21	
Pergola wall, steps and terrace .	16,244 30	
Carriage-sheds .	15,310 98	
Ellicott House .	14,922 87	
Ellicottdale .	12,542 94	
Machinery, tools, etc. .	12,413 15	
Structures .	12,136 56	
Playstead .	10,399 76	
Propagating-house .	8,205 55	
Electric lighting .	5,600 00	
Terrace wall .	3,956 05	
Concourse, Scarboro' Hill .	3,569 80	
Culverts .	3,129 34	
Stable .	2,912 68	
Carriage shelter .	2,694 70	
Fences .	1,322 80	
Boating-service .	51 16	
		2,102,460 01

MARINE PARK SYSTEM.

DORCHESTERWAY.

Roadways, sidewalks, gutters and drainage .	\$31,160 73	
Filling .	21,821 82	
		\$52,982 55

Amounts carried forward,

\$6,201,240 70

PARK DEPARTMENT.

51

<i>Amounts brought forward,</i>	\$52,982 55	\$6,201,240 70
Grading, loam and general work	9,546 15	
Plans, designs and superintendence	1,317 24	
Culverts	653 00	
Plantations	102 90	

64,601 84

STRANDWAY.

Sea-wall and grading	\$112,511 28
Filling	102,891 36
Clearing, grading, loam and general work	26,330 47
Public landing	5,517 04
Drainage	4,507 98
Plans, designs and superintendence	479 77
Culverts	60 50
Plantations	18 80

252,317 20

MARINE PARK.

Filling, lawns and woods, grading, loam and general work	\$579,625 43
Iron pier and railing	175,571 99
Head-house	110,812 40
Pier-head	67,232 97
Structures, temporary pier, and gas-lights	43,829 05
Roadways, sidewalks, gutters and drainage	38,979 62
Plantations	7,078 52
Bulkhead	4,996 00
Plans, designs and superintendence	3,870 46
Electric lighting	2,453 04
Water-supply, settees and fence	1,988 04
Dredging	1,114 20
Boating-service	1,023 65
Machinery, tools and implements	38 00

1,038,613 33

CASTLE ISLAND.

Temporary buildings and structures	\$25,512 20
Clearing, grading grounds and drainage	3,837 98
Water-supply, settees and tent	2,002 98
Plantations	486 98
Shelter	100 00

31,940 14

WOOD ISLAND PARK.

Lawns and woods, grading, loam and general work	\$101,172 75
Neptune bridge	32,320 63
Filling	29,852 82
Field-house	20,283 89
Roads, walks, gutters and drainage	13,107 02
Bath-house	9,830 66
Plantations	9,797 39
Gymnasium grounds, apparatus and play-ground	7,280 92
Iron fence and frame	3,039 99
Water-supply and settees	2,452 68
Electric lighting	2,163 53
Plans, designs and superintendence	1,688 03
Culverts	425 00
Tool-house	213 09
Machinery, tools and implements	42 80

233,671 20

Amount carried forward,

\$7,822,384 41

Amount brought forward,

\$7,822,384 41

CHARLESBANK.

Sea-wall and filling	\$176,353 90	
Gymnasium grounds, apparatus, filling, loam and general work	52,434 28	
Men's Lavatory building	23,250 53	
Women's Lavatory building and children's shelter	17,689 18	
Plantations	12,137 30	
Walks and drainage	11,769 27	
Iron railing, fence and gas-lights	9,647 29	
Plans, designs and superintendence	2,076 27	
Damage	972 51	
Water-supply	831 41	
Machinery, tools, etc.	56 00	
		307,217 94

CHARLESTOWN HEIGHTS.

Grading, lawns and woods, filling, loam and general work	\$32,713 24	
Shelter building	27,240 32	
Retaining-wall	18,838 98	
Sidewalks, gutters and drainage	8,227 97	
Plantations	7,831 33	
Steps	3,971 42	
Plans, designs and superintendence	1,430 59	
Water-supply, settees, fountains and flagstaff	486 51	
Electric lighting	334 00	
		101,074 36

CHARLESTOWN PLAYGROUND.

Grading, loam and general work	\$8,933 21	
Plantations	475 60	
Plans, designs and superintendence	204 99	
Walks and drainage	9 78	
		9,623 58

DORCHESTER PARK.

Grading, lawns and woods, loam and general work	\$1,479 27	
Shelter	963 32	
Plans, designs and superintendence	797 40	
Temporary structures	774 95	
Water-supply	105 53	
Walks and drainage	4 48	
		4,124 95

FRANKLIN FIELD.

Grading, lawns and woods, loam and general work	\$32,136 86	
Walks, gutters and drainage	26,916 48	
Plantations	11,746 74	
Buildings	6,744 98	
Fence, flagstaff and wall	1,182 72	
Plans, designs and superintendence	815 06	
Machinery, tools, etc.	480 55	
Water-supply	46 89	
		80,070 28

Amount carried forward,

\$8,324,495 52

PARK DEPARTMENT.

53

Amount brought forward,

\$8,324,495 52

NORTH END BEACH.

Clearing, grading and general work	\$60,848 31	
Administration Building and Women's bath-house	39,902 70	
Piers	31,335 96	
Men's bath-house	13,052 97	
Walls	8,422 73	
Iron railing	3,698 88	
Walks and drainage	1,946 63	
Filling	1,302 04	
Plans, designs and superintendence	1,189 14	
Boating service	578 32	
Band-stand	571 44	
Boring	224 62	
Electric lighting	181 25	
Temporary building	33 73	
Plantations	7 50	
		163,296 22

COPP'S HILL TERRACES.

Walls, drainage, grading and general work	\$29,710 65	
Plantations	405 00	
Electric lighting	245 25	
Plans, designs and superintendence	110 83	
Sidewalks	90 58	
		30,562 31

CHESTNUT HILL PARK.

Plantations	\$359 01	
Grading, lawns and woods, loam and general work	130 67	
Fence	31 74	
Roadways, gutters and drainage	7 75	
		529 17

NORTH BRIGHTON PLAYGROUND.

Filling	\$1,907 83	
Grading, loam and general work	1,403 08	
Walks, gutters and drainage	192 36	
		3,503 27

NEPONSET PLAYGROUND.

Drainage	\$2,544 76	
Grading, loam and general work	1,010 45	
Bulkhead	553 10	
Plans and designs	239 21	
Water-supply	152 48	
		4,500 00

BILLINGS FIELD.

Filling	\$1,600 00	
Plans and designs	239 37	
Grading, loam and general work	114 54	
		1,953 91

Amount carried forward,

\$8,528,840 40

Amount brought forward,

\$8,528,840 40

FIRST-STREET PLAYGROUND.

Grading, loam and general work	\$5,320 40	
Gutters and drainage	2,272 41	
Filling	987 28	
Water-supply	912 96	
Plantations	61 80	
		9,554 85

FELLOWS-STREET PLAYGROUND.

Filling	496 28
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SUNDRY ACCOUNTS.

General account	\$73,987 50	
Park Nursery	29,947 07	
		103,934 57
		\$8,642,826 10

VI.

*Summary of Expenditures on account of Public Park Land,
Construction and Betterments from the Organization of the
Board October 8, 1875, to January 31, 1899.*

LAND.

Main Park System :

Fens	\$596,254 49	
Riverway	452,457 53	
Leverett Park	269,104 04	
Jamaica Park	812,843 56	
Arboreway	245,584 25	
Arnold Arboretum and Bus- sey Park.	79,315 85	
West Roxbury Parkway	117,665 29	
Franklin Park	1,551,196 63	
		\$4,124,421 64

Marine Park System :

Dorchesterway	\$63,735 54	
Strandway	449,315 97	
Marine Park	232,972 57	
		746,024 08

Wood Island Park	132,800 00	
Charlesbank	373,916 99	
Trinity Triangle	30,000 00	
Charlestown Heights	50,538 02	
Charlestown Playground	172,923 31	
Dorchester Park	63,239 97	
Franklin Field	157,341 22	
North End Beach	323,364 44	
Copp's Hill Terraces	90,858 19	
North Brighton Playground	21,861 73	
		\$6,292,289 59

Amount carried forward,

<i>Amount brought forward,</i>	\$6,292,289 59
Neponset Playground	10,703 52
Billings Field	643 75
Freeport-street Triangle	4,000 00
North End Playground	130,498 16
Mystic Playground	50,000 00
Fellows-street Playground	14,503 72
Christopher Gibson Playground	37,500 00
	\$6,540,138 74

CONSTRUCTION.

Main Park System :

Commonwealth Avenue	\$104,099 22
Fens	2,061,623 92
Riverway	632,147 75
Leverett Park	368,462 66
Jamaica Park	243,132 17
Arboreway	362,149 23
Arnold Arboretum and Bus-	
sey Park	316,902 11
West Roxbury Parkway	10,263 63
Franklin Park	2,102,460 01
	\$6,201,240 70

Marine Park System :

Dorchesterway	\$64,601 84
Strandway	252,317 20
Marine Park	1,038,613 33
Castle Island	31,940 14
	1,387,472 51
Wood Island Park	233,671 20
Charlesbank	307,217 94
Charlestown Heights	101,074 36
Charlestown Playground	9,623 58
Dorchester Park	4,124 95
Franklin Field	80,070 28
North End Beach	163,296 22
Copp's Hill Terraces	30,562 31
Chestnut Hill Park	529 17
North Brighton Playground	3,503 27
Neponset Playground	4,500 00
Billings Field	1,953 91
First-street Playground	9,554 85
Fellows-street Playground	496 28
General Account	73,987 50
Park Nursery	29,947 07
	8,642,826 10

BETTERMENTS.

Betterment expenses	13,356 10
	\$15,196,320 94

VII.

**PARK BETTERMENTS COLLECTED BY CITY COLLECTOR,
TO FEBRUARY 1, 1899.**

	Assessm'ts committed to Collector.	Abated.	Net Assessm'ts	Collected.	Outstand- ing Feb. 1, 1899.
Public Park, Back Bay...	\$434,600 00	\$144,195 73	\$290,404 27	\$290,404 27	
Marine Park.....	23,543 00	12,616 80	10,926 20	10,926 20	
Franklin Park.....	135,029 00	122,000 66	13,028 34	13,028 34	
Parkway, Old Harbor...	60,789 00	50,426 00	10,363 00	8,256 00	\$2,107 00
“ Muddy River...	108,972 00	78,893 00	30,079 00	21,889 00	8,190 00
“ West Roxbury..	154,107 00	111,630 00	42,477 00	30,238 00	12,239 00
“ Dorchester.....	9,713 00	2,196 94	7,516 06	5,555 34	2,160 72
	\$926,753 00	\$521,959 13	\$404,793 87	\$380,097 15	\$24,696 72

VIII.

PUBLIC PARK DEBT.

Liabilities.

Total loan outstanding, January 31, 1899 . . . \$12,618,300 00

Resources.

Resources of Sinking Fund, January 31, 1899 . . . 2,883,626 90

Net debt, January 31, 1899 . . . \$9,734,673 10

Park Statistics to January 31, 1899.

PARKS.	Year of Taking.	COST TO DATE.		Total.	Area.	Length of Driveways	Length of Walks.	Length of Rides.	Area of Ponds and Rivers.
		Land.	Construction						
MAIN PARK SYSTEM:									
Commonwealth Avenue.....	1894.....	.....	\$104,099 22	\$104,099 22	30 acres.....	2.8 miles	4.13 miles		
* Fens	1879.....	\$596,254 49	2,061,623 92	2,657,878 41	115 "	4 "	6.7 "	1.1 miles	28 acres
* † Riverway.....	1890.....	452,457 53	632,147 75	1,084,605 28	40 "	1.4 "	2.8 "	1.2 "	8 "
* † Leverett Park.....	1890 and 1892	269,104 04	368,462 66	637,566 70	60 "	1.2 "	3.4 "	0.9 mile	14 "
* Jamaica Park.....	1892.....	812,843 56	243,132 17	1,055,975 73	120 "	1.5 "	5.6 "	0.7 "	64.5 "
Arborway.....	1892.....	245,584 25	362,149 23	607,733 48	36 "	3.4 "	1.25 "	1.4 miles	
* Arnold Arboretum.....	1882 and 1895	79,315 85	316,902 11	396,217 96	223 "	3.4 "	6 "	.....	0.6 acre
West Roxbury Parkway.....	1894.....	117,665 29	10,263 63	127,928 92	150 "	7 "	8.1 "	2.4 miles	
* Franklin Park.....	1883 and 1884	1,551,196 63	2,102,460 01	3,653,656 64	527 "	7.3 "	17 "	1 mile	7.4 acres
MARINE PARK SYSTEM:									
* Dorchesterway.....	1892.....	63,735 54	64,601 84	128,337 38	6 "	0.75 "	1.6 "		
Strandway	{ 1890, 1892 } and 1897 }	449,315 97	252,317 20	701,633 17	{ 48 " land } { 212 " flats }	1.7 "	3.1 "		
* Marine Park.....	1883.....	232,972 57	1,038,613 33	1,271,585 90	{ 34 " land } { 150 " flats }	0.9 mile	2.6 "		4.4 "
Castle Island.....	1890.....	.....	31,940 14	31,940 14	{ 21 " land } { 83 " flats }	0.4 "	1.6 "		
Carried forward.....	.....	\$4,870,445 72	\$7,588,713 21	\$12,459,158 93	1,855 acres	35.75	63.88	8.7	126.9

Park Statistics to January 31, 1899.—Continued.

PARKS.	Year of Taking.	COST TO DATE.		Total.	Area.	Length of Driveways	Length of Walks.	Length of Rides.	Area of Ponds and Rivers.
		Land.	Construction						
<i>Brought forward</i>.....	.....	\$4,870,445 72	\$7,588,713 21	\$12,459,158 93	1,855 acres	35.75	63.88	8.7	126.9
*WOOD ISLAND PARK.....	1882 and 1891	132,800 00	233,671 20	366,471 20	46 acres land } 165 " flats }	0.3 miles	2.5 miles		
*CHARLESBANK.....	1883.....	373,916 99	307,217 94	681,134 93	10 "		1.5 "		
*TRINITY TRIANGLE.....	1885.....	30,000 00	.....	30,000 00	5,410 sq. feet				
*CHARLESTOWN HEIGHTS.....	1891.....	50,538 02	101,074 36	151,612 38	4 acres land } 6 " flats }		0.4 mile		
*CHARLESTOWN PLAYGROUND.....	1891.....	172,923 31	9,623 58	182,546 89	14 " land } 4 " flats }		0.9 "		
*DORCHESTER PARK.....	1891.....	63,239 97	4,124 95	67,364 92	26 "				
*FRANKLIN FIELD.....	1892.....	157,341 22	80,070 28	237,411 50	77 "				
*NORTH END PARK.....	1893.....	419,222 63	193,858 53	613,081 16	3 " land } 4 " flats }		0.43 "		
*CHESTNUT HILL PARK.....	1898.....	.....	529 17	529 17	37.1 "	2.4 "			
*NORTH BRIGHTON PLAYGROUND.....	1894.....	21,861 73	3,503 27	25,365 00	14 "				
NEPONSET PLAYGROUND.....	1896.....	10,703 52	4,500 00	15,203 52	18 "				
BILLINGS FIELD.....	1896.....	643 75	1,953 91	2,597 66	11 "				
FIRST-STREET PLAYGROUND.....	1897.....	.....	9,554 85	9,554 85	4.6 "		0.4 "		
*FREEPORT-SORET TRIANGLE.....	1897.....	4,000 00	.....	4,000 00	6,263 sq. feet				
*NORTH END PLAYGROUND.....	1897.....	130,498 16	.....	130,498 16	11,384 "				

*MYSTIC PLAYGROUND.....	1897..	50,000 00	.....	50,000 00	2.3 acres.			
*FELLOWS-STREET PLAYGROUND...	1897.....	14,503 72	486 28	15,000 00	36,955 sq. feet.			
*CHRISTOPHER GIBSON " ...	1897.....	37,500 00	.....	37,500 00	8 acres.			
General account		\$6,540,138 74	\$8,538,891 53	\$15,079,030 27				
Park Nursery.....		.....	73,987 50	73,987 50				
Betterment Expenses.....		.....	29,947 07	29,947 07				
		.....	13,356 10	13,356 10				
		\$6,540,138 74	\$8,656,182 20	\$15,196,320 94	2,308 acres.	38.45 miles	70.01 miles	126.9 acres

* The lands in these parks and playgrounds have been paid for in full.

† An additional area of 34 acres is within the limits of the town of Brookline.
‡ An additional area of 35 acres of land and 125 acres of water is under the control of the Metropolitan Water Board.

Of the above total lengths of Driveways, Walks and Rides, there have been completed to date respectively 24.7 miles, 34.7 and 6.2 miles.

PENDING CONTRACTS.

The Pending Contracts, with the Value of the Unperformed Work, are as follows :

CONTRACTOR.	Place.	Nature of Work.	Date of Finishing speci- fied in Contract.	Amount.	Unperformed.
Woodbury & Leighton.....	Riverway	Longwood-avenue bridge.....	June 1, 1899.....	\$57,500 00	\$7,228 37
D. F. O'Connell.....	Jamalca Park.....	Wall.....	April 1, 1899.....	4,760 00	4,760 00
C. A. Dodge & Co.....	Arnold Arboretum.....	Posts	March 1, 1899.....	1,750 00	1,750 00
John Williams.....	"	Gates.....	March 1, 1899.....	2,850 00	1,350 00
A. Hathaway's Sons.....	Franklin Park.....	Toilet room	August 31, 1898.....	624 00	624 00
W. A. & H. A. Root.....	"	Stable.....	December 31, 1898.....	4,590 00	2,501 55
D. F. O'Connell.....	"	Wall.....	May 1, 1899.....	5,250 00	5,250 00
Lynn Stall Company.....	"	Stable floor.....	March 1, 1899.....	875 00	875 00
W. A. Snow & Co.....	Charlesbank.....	Fence	November 1, 1898.....	1,430 60	153 60
Boston Bridge Works.....	Wood Island Park.....	Foot-bridges and lamp-posts.....	December 15, 1898.....	2,915 00	2,915 00
W. A. Snow & Co.....	North End Park.....	Fence.....	November 1, 1898.....	867 48	867 48
Simon J. Donovan.....	Strandway.....	Sea-wall and grading.....	June 1, 1898.....	79,350 00	20,891 50
				\$162,762 08	\$49,166 50

APPENDIX.

REPORT OF THE COMMITTEE OF THE MASSACHUSETTS EMERGENCY AND HYGIENE ASSOCIATION IN CHARGE OF THE WOMEN'S AND CHILDREN'S DIVISION AT CHARLESBANK.

BOSTON, January 18, 1899.*To the Board of Park Commissioners:*

GENTLEMEN, — In submitting to you our report for the eighth year of our superintendence at Charlesbank, we first note the falling off in general attendance from that of last year; secondly, the growing regularity in the attendance of those who frequent the place, especially among the older ones. This latter fact is full of encouragement, as it shows that the need of systematic, gymnastic practice in relation to health is being more and more appreciated, especially when pursued out of doors. The total week-day attendance for the season of 1898 was 144,787, or a daily average of 999; total Sunday attendance, 18,214, or a Sunday average of 759; attendance in gymnasium, 57,499, or 14,143 less than in the season of 1897, though the general attendance of 1898 was 73,785 less, and the Sunday attendance 2,501 less.

We ascribe this diminution in numbers to the opening of so many other parks to the public, the East Boston, Charlestown and North End Parks and gymnasia especially have attracted many to their advantages, who formerly had only Charlesbank for their summer resort.

There have been regular morning, afternoon and evening (6.45 to 7.45) classes for women, each class meeting twice a week, and two classes for girls (beginners and advanced pupils) twice a week. These classes were instructed by Misses Cutler, Mahoney and Wessel, and the work done has been of a stronger character than ever before.

The bath-house, directly opposite the lodge, with its free, public facilities for swimming, has not had the effect of greatly lessening the number of spray baths taken in connection with our gymnasium. Though for hygienic reasons it was deemed best not to have the tub-bath used this year, the total number of spray baths, 2,704, is but 560 less than the spray and tub baths of 1897, for after all it is convenient and saves time to take a spray bath in the same enclosure with the gymnasium.

The Kindergarten, this year as before, has been for those who were too young for the gymnasium and too old for the sand pens, its oldest girls being appointed volunteer teachers out on the green and enjoying their small responsibilities. The babies of

seven or eight years ago, who practically have spent their summers at Charlesbank, are now its agile little girls, while those who are to-day its puny babies will in their turn grow as strong as their predecessors, if they are left to the sunshine, the sand-pens and the grassy kindergarten of Charlesbank.

The winter evening classes, held from November to April, have grown so large that this season (1897 and 1898) they are held four times a week under the instruction of Miss Cutler on Mondays and Thursdays, and of Miss Mahoney on Tuesdays and Fridays, two or three of Dr. Sargent's pupils giving their assistance as desired.

In June, Miss Elizabeth C. McMartin, who had been Superintendent since the opening of this Division, resigned to accept a position offered her in New York. We were loth to part with her, for her tact and firmness had prevented friction, her patience and skill had developed the gymnastic work, and her personal qualities had won her friends of all who were associated with her. We were fortunate, however, in securing the services of Miss Harriet S. Cutler, of the Allen Gymnasium, as her successor, and under her excellent guidance and the constant supervision of the committee the division has prospered.

KATE GANNETT WELLS,

ANNA PHELPS WILLIAMS,

On behalf of the Committee.

STATUTES OF THE COMMONWEALTH RELATING TO
PUBLIC PARKS IN THE CITY OF BOSTON.

[Stat. 1898. — Chap. 141.]

AN ACT TO AUTHORIZE THE SALE OF CERTAIN LAND TAKEN FOR
PUBLIC PARK PURPOSES IN THE CITY OF BOSTON.

SECTION 1. The board of park commissioners of the city of Boston is hereby authorized, with the approval of the mayor of said city, to sell a parcel of land containing nine hundred twenty-one and eight tenths square feet, situated on the northwesterly side of the Back Bay Fens, at the Junction of Audubon road and Peterborough street, in said city, and to apply the proceeds of the sale to the payment of other lands taken by said city for park purposes.

SECT. 2. This act shall take effect upon its passage.

(Approved March 8, 1898.)

[Stat. 1898. — Chap. 313.]

AN ACT TO ENABLE THE CITY OF BOSTON TO FINISH THE CONSTRUCTION OF ITS PUBLIC PARKS.

SECTION 1. The city of Boston shall continue the construction of the public parks of said city, other than playgrounds, and to pay the expenses to be incurred therefor, including payments for land, the city treasurer shall from time to time, on the request of the mayor, issue to the total amount of five hundred thousand dollars, notes, bonds or scrip of said city, payable thirty years from the date thereof, and bearing interest payable at such times and at such rate, not exceeding four per cent. per annum, as shall be fixed by said treasurer: *provided, however*, that the total amount of such bonds, notes or scrip shall not exceed five hundred thousand dollars, and the indebtedness so incurred shall not be taken into account in determining the debt limit of said city; and *provided, further*, that no part of the amount hereby authorized shall be used for the payment of any land not already taken or purchased. Any loan authorized by the city council of said city for the purposes aforesaid, between the first day of January in the year eighteen hundred and ninety-eight and the date of the passage of this act, shall not be taken into account in determining the debt limit of said city, but the loan above authorized shall be reduced by such amount.

SECT. 2. This act shall take effect upon its passage.

(Approved April 12, 1898.)

[Stat. 1898. — Chap. 412.]

AN ACT TO PROVIDE FOR A COMPREHENSIVE SYSTEM OF PLAY-
GROUNDS FOR THE CITY OF BOSTON.

SECTION 1. The board of park commissioners of the city of Boston, for the purpose of establishing a comprehensive system of playgrounds to meet the wants of the different sections of said city, is hereby authorized to purchase, with the approval of the mayor of said city, land for playgrounds in such different locations, not exceeding twenty in number, as they may deem best adapted for such purpose: *provided, however*, that not more than two hundred thousand dollars shall be expended in any one year for said purposes.

SECT. 2. To meet the expenses incurred under this act the city treasurer of said city shall from time to time, at the request of the mayor, issue, to the total amount of five hundred thousand dollars, notes, bonds or scrip of said city, payable at such time, not exceeding thirty years from their date, and bearing interest at such rates not exceeding four per cent. per annum, and such interest being payable at such times, as shall be fixed by said treasurer; and such notes, bonds or scrip shall be within the limit of indebtedness of said city.

SECT. 3. This act shall take effect upon its acceptance by the city council of the city of Boston.

(Approved May 11, 1898.)

[Stat. 1898. — Chap. 452.]

AN ACT RELATIVE TO THE HEIGHT OF BUILDINGS ON AND NEAR
COPLEY SQUARE IN THE CITY OF BOSTON.

SECTION 1. Any building now being built or hereafter to be built, rebuilt or altered in the city of Boston, upon any land abutting on St. James avenue, between Clarendon street and Dartmouth street, or upon land at the corner of Dartmouth street and Huntington avenue, now occupied by the Pierce building, so-called, or upon land abutting on Dartmouth street, now occupied by the Boston Public Library building, or upon land at the corner of Dartmouth street and Boylston street, now occupied by the New Old South Church building, may be completed, built, rebuilt or altered to the height of ninety feet, and no more; and upon any land or lands abutting on Boylston street, between Dartmouth street and Clarendon street, may be completed, built, rebuilt or altered to the height of one hundred feet, and no more: *provided, however*, that there may be erected on any such building, above the limits hereinbefore prescribed, such steeples, towers, domes, sculptured ornaments and chimneys as the board of park commissioners of said city may approve.

SECT. 2. The provisions of chapter three hundred and thirteen of the acts of the year eighteen hundred and ninety-six, and of chapter three hundred and seventy-nine of the acts of the year

eighteen hundred and ninety-seven, so far as they limit the height of buildings, shall not be construed to apply to the territory specified and restricted in section one of this act.

SECT. 3. The owner of or any person having an interest in any building upon any land described in section one of this act, the construction whereof was begun but not completed before the fourteenth day of January in the current year, who suffers damage under the provisions of this act by reason or in consequence of having planned and begun such construction, or made contracts therefor, for a height exceeding that limited by section one of this act for the locality where said construction has been begun, may recover damages from the city of Boston for material bought or actually contracted for, and the use of which is prevented by the provisions of this act, for the excess of cost of material bought or actually contracted for over that which would be necessary for such building if not exceeding in height the limit prescribed for that locality by section one of this act, less the value of such materials as are not required on account of the limitations resulting from the provisions of this act, and the actual cost or expense of any re-arrangement of the design or construction of such building made necessary by this act, by proceedings begun within two years of the passage of this act, and in the manner prescribed by law for obtaining payment for damages sustained by any person whose land is taken in the laying out of a highway in said city.

SECT. 4. Any person sustaining damage or loss in his property by reason of the limit of the height of buildings provided for in this act, may recover such damage or loss from the city of Boston, by proceedings begun within three years of the passage of this act, and in the manner prescribed by law for obtaining payment for damages sustained by any person whose land is taken in the laying out of a highway in said city.

SECT. 5. This act shall take effect upon its passage.

(Approved May 23, 1898.)

[Stat. 1898. — Chap. 540.]

AN ACT RELATIVE TO STREETS AND LANDS IN THE NEIGHBORHOOD OF PARKS, PARKWAYS AND BOULEVARDS IN THE CITY OF BOSTON.

SECTION 1. The board of park commissioners of the city of Boston may authorize connections to be made of public ways with any boundary road of any public park or with any parkway or boulevard now or hereafter placed under the charge of said board, according to such directions, widths and grades, and with such curb and other surface construction for the parts of such ways situated within the distance of five hundred feet from a park, parkway or boulevard as they shall prescribe, whether any such directions, widths and grades are shown on any plan, or whether any such way has been laid out or constructed under the provisions of chapter three hundred and twenty-three of the acts of

the year eighteen hundred and ninety-one and acts in amendment thereof or in addition thereto, or otherwise.

SECT. 2. Said board of park commissioners shall have power to plant trees, place seats, standpipes, drinking fountains, and works of art on said parts of ways, and may establish reasonable rules and regulations relating to the displaying of advertisements and to the height and the character of fences placed upon said parts of ways, as they shall deem the public interests require.

SECT. 3. Any person violating any such rules or regulations shall for each day that such violation continues forfeit and pay a fine not exceeding twenty dollars.

(Approved June 20, 1898.)

STATUTES OF THE COMMONWEALTH RELATING TO
PUBLIC PARKS IN OR NEAR THE
CITY OF BOSTON.

YEAR. CHAPTER.

1866. 247. — An Act to authorize the Erection of a Sea wall, and the filling of certain flats in Charles river, to abate a nuisance.
- *1870. 283. — An Act for the Laying out of one or more Public Parks in or near the City of Boston.
- †1875. 185. — An Act for the Laying out of Public Parks in or near the City of Boston.
1880. 144. — An Act to authorize the connection of the Arnold Arboretum with the System of Parks of the City of Boston.
1881. 92. — An Act in addition to an Act for the Laying out of Public Parks in or near the City of Boston. [Charles-river Embankment.]
1881. 197. — An Act to authorize the Construction of the Charles-river promenade.
1882. 168. — An Act to authorize the City of Boston to Issue a Public Park Loan
1884. 226. — An Act in relation to betterments for Locating, Laying out, and Constructing Streets, Ways, and Public Parks.
1884. 237. — An Act in relation to assessments for Public Improvements.
1885. 299. — An Act requiring notice of assessments of betterments to be given to the party to be charged thereby.
1885. 360. — An Act in further addition to an Act for the Laying out of Public Parks in or near the City of Boston. [Marine Park.]
1886. 65. — An Act extending the time for the completion of the Public Park in the City of Boston known as the Charles-river Embankment.
1886. 134. — An Act to change a portion of the line of the Sea wall of the Public Park in the City of Boston, known as the Charles-river Embankment.
1886. 304. — An Act to authorize a Loan for the construction of Public Parks in or near the City of Boston.
1887. 312. — An Act to authorize a Loan for the payment for lands heretofore acquired for Public Parks in or near the City of Boston.
1887. 427. — An Act to enlarge the area for the proposed Marine Park of the City of Boston between South Boston and Castle Island.

* This Act was to take effect when accepted by two-thirds of the legal voters voting thereon at the State election. The vote in favor was 9,233; against, 5,916. The Act consequently was rejected.

† This Act was accepted by a majority of the legal voters voting thereon, June 9, 1875. Yeas, 3,706; nays, 2,311.

YEAR. CHAPTER.

1888. 376. — An Act to authorize the City of Boston to refund a portion of the money paid as betterments for the Marine Park in said City.
1888. 392. — An Act to enable the City of Boston, for the purpose of obtaining lands for its Public Parks, to incur indebtedness outside of the limit fixed by law.
1889. 129. — An Act relating to buildings in the Public Parks of the City of Boston.
1889. 438. — An Act to authorize the enlargement of the proposed Marine Park in the City of Boston.
1890. 271. — An Act to authorize the City of Boston to incur indebtedness outside of its debt limit, to procure and construct one or more Public Parks in the Charlestown District of the City of Boston.
1890. 339. — An Act changing the boundary between the City of Boston and the Town of Brookline.
1890. 444. — An Act to amend an Act authorizing the City of Boston to incur indebtedness outside of its debt limit to procure and construct one or more Public Parks in the Charlestown District of the City of Boston.
1891. 301. — An Act to authorize the City of Boston to incur a debt for Park purposes beyond the limit fixed by law.
1891. 344. — An Act to authorize the City of Boston to construct a Sea wall and extend the Charles-river Embankment.
1891. 390. — An Act to provide for the appointment of the Charles-river Improvement Commission.
1892. 371. — An Act to authorize the City of Boston to take Jamaica Pond and Ward's Pond for a Public Park.
1893. 126. — An Act in relation to raising the grade and changing the location of the Providence Division of the Old Colony Railroad in the City of Boston.
1893. 211. — An Act in relation to the issue of bonds and certificates for Park purposes by the City of Boston.
1893. 225. — An Act to authorize cities and towns to establish and maintain Public Playgrounds.
1893. 258. — An Act to authorize the City of Boston to refund or abate a portion of its betterments assessed for the extension of the Marine Park.
1893. 282. — An Act to provide for a Public Park in Wards 6 and 7 of the City of Boston.
1893. 300. — An Act relative to the Laying out of Public Parks by towns and cities. [Boulevard Act.]

YEAR. CHAPTER.

1893. 331. — An Act relative to leasing open spaces for Gardens and Playgrounds by cities and towns.
1893. 407. — An Act to establish a Metropolitan Park Commission.
1893. 416. — An Act relating to an Act relative to the Laying out of Public Parks by towns and cities.
[Amended Stat. 1893, Chap. 300.]
1893. 435. — An Act in relation to the construction of a Sea wall and the extension of the Charles-river Embankment by the City of Boston.
1893. 475. — An Act to provide for the improvement of Charles river.
1894. 288. — An Act to authorize the Metropolitan Park Commission to construct Roadways and Boulevards.
1894. 396. — An Act to authorize the City of Boston to incur indebtedness beyond the limit fixed by law, for Park purposes.
1894. 483. — An Act to authorize the Commonwealth to acquire the location in part of the Boston, Revere Beach & Lynn Railroad, and to authorize a relocation in part of said railroad.
1894. 509. — An Act to authorize the Metropolitan Park Commission to expend a sum of money, in addition to the amount heretofore authorized, for open spaces along or near the Charles river.
1895. 45. — An Act to authorize the Extension of the Arnold Arboretum.
1895. 185. — An Act to authorize the City of Boston to abate a Portion of the Betterments made on account of the Laying out of Jamaica Park and Arborway.
1895. 272. — An Act changing the Limits within which Land may be taken by the Metropolitan Park Commission within the City of Medford.
1895. 305. — An Act relative to the taking by the Metropolitan Park Commission of Revere Beach, so-called, in the town of Revere.
1895. 450. — An Act relative to the Metropolitan Park Commission.
1896. 199. — An Act relative to violations of regulations of Public Parks.
1896. 284. — An Act relative to excavations, fillings and constructions in tide waters for the purposes of the Public Parks of the City of Boston.
1896. 313. — An Act relative to the Building line and height of buildings on Parkways, Boulevards and Parks.
1896. 411. — An Act to authorize the sale of certain lands taken for Public Park purposes in the City of Boston.
1896. 453. — An Act to authorize the City of Boston to continue the construction of its Public Parks.

YEAR. CHAPTER.

1896. 465. — An Act to better define the authority of the Metropolitan Park Commission.
1896. 466. — An Act increasing the amount of money to be placed at the disposal of the Metropolitan Park Commission for general purposes.
1896. 472. — An Act increasing the amount of money placed at the disposal of the Metropolitan Park Commission for the construction of Roadways and Boulevards.
1896. 550. — An Act relative to the Metropolitan Parks and Boulevards.
1897. 121. — An Act to further define the authority of the Metropolitan Park Commission.
1897. 162. — An Act to authorize the City of Boston and the Town of Brookline to rebuild Longwood-avenue bridge.
1897. 311. — An Act to provide for the interest and sinking-fund requirements of the Metropolitan Parks Loans and expenses of the Metropolitan Park Commission.
1897. 365. — An Act to authorize the Board of Park Commissioners of the City of Boston to lease lands or buildings under their control for boat-houses and other purposes.
1897. 379. — An Act relative to the building line and height of buildings on parkways, boulevards and parks.
1897. 394. — An Act relative to Parkways in the City of Boston.
1897. 396. — An Act to authorize the City of Boston to abate a portion of the betterment assessment made on account of the laying out of Dorchesterway.
1897. 464. — An Act to increase the amount of money to be placed at the disposal of the Metropolitan Park Commission for general purposes.
1897. 521. — An Act to increase the amount of money to be placed at the disposal of the Metropolitan Park Commission for the construction of roadways and boulevards.
1897. 523. — An Act to provide for a highway around the Back Bay Fens in the City of Boston.
1898. 141. — An Act to authorize the sale of certain land taken for public park purposes in the City of Boston.
1898. 313. — An Act to enable the City of Boston to finish the construction of its public parks.
1898. 412. — An Act to provide for a comprehensive system of playgrounds for the City of Boston.
1898. 452. — An Act relative to the height of buildings on and near Copley Square in the City of Boston.

YEAR. CHAPTER.

1898. 455. — An Act to define the liability of the Commonwealth arising from defects in streets on certain lands under the care and control of the Metropolitan Park Commission.
1898. 463. — An Act to provide for the improvement of the banks of rivers and ponds within the Metropolitan Parks district.
1898. 473. — An Act relative to betterment taxes assessed by the Metropolitan Park Commission.
1898. 530. — An Act to increase the amount of money to be placed at the disposal of the Metropolitan Park Commission for general purposes.
1898. 531. — An Act to authorize the construction of a dam across the Charles river, between the cities of Boston and Cambridge.
1898. 540. — An Act relative to streets and lands in the neighborhood of Parks, Parkways and Boulevards in the City of Boston.
1898. 547. — An Act to authorize the Metropolitan Park Commission to construct a bridge across the Saugus river.



REPORT
OF THE
PAUPER INSTITUTIONS TRUSTEES
FOR THE YEAR 1898-99.

OFFICE OF THE PAUPER INSTITUTIONS TRUSTEES
OF THE CITY OF BOSTON, 28 COURT SQUARE, BOSTON, MASS.

HON. JOSIAH QUINCY,

Mayor of Boston:

SIR, — The Pauper Institutions Trustees herewith present their report for the financial year ending January 31, 1899:

Organization. — This department remained constituted as stated in the first annual report until May 1, 1898, when the term of Walter Hunnewell having expired, he was re-appointed for the term of five years. At the same time the department was organized according to law for the year 1898-99 by the choice of William T. Sedgwick as Chairman and Alice N. Lincoln as Secretary. During the absence of the Chairman in the summer, Mr. William L. Rutan served as Acting Chairman.

Powers and Duties of the Pauper Institutions Trustees. — Chapter 395 of the Acts of the General Assembly of 1897, as amended by Chapter 451 of said Acts, provides that the Pauper Institutions Trustees "shall have, exercise and perform all the powers and duties relating to poor and indigent persons, or to any institution or place in which they are confined, or detained, or cared for now, conferred by the statutes of this Commonwealth upon the Institutions Commissioner

of the said city of Boston." Poor and indigent children, the poor and indigent insane, and those receiving out-door relief are, however, otherwise specifically provided for, so that the Pauper Institutions Trustees have in their charge only those poor and indigent adults not insane who receive in-door relief.

During the year 1898 these persons have been cared for, with a few exceptions to be noted hereafter, in two separate institutions, one of which is located on Long Island in Boston Harbor and the other near the northern-most extremity of the city of Boston in the Charlestown district. The former is by far the larger, having had during the year an average total population of 706, while the average total population of the latter has been 107.

The Boston Almshouse in Charlestown for Women and Aged Couples.—Some differentiation between the institutions at Charlestown and Long Island had been made by previous administrations, the Charlestown Almshouse having been considered a more quiet and retired home for the worthy poor, and especially a place for aged couples; but such differentiation or classification had been incomplete, and during the first year of the administration of the present Trustees it had become evident that a more marked differentiation would be in the interests of a wise classification. Accordingly on June 8, 1898, it was voted that the institution at Charlestown should be regarded on and after July 15, 1898, as an Almshouse for Women and Aged Couples, and in furtherance of this policy it was decided to install as its head a woman superintendent. The Board was fortunate in securing for this position Miss Sarah Greenleaf Weeden, who had had previous experience in charitable and philanthropic work in connection especially with the Young Women's Christian Association, and who brought to our service not only a considerable experience, but a strong and attractive personality and a high enthusiasm. Miss Weeden has already proved herself to be a competent, wise and humane superintendent, and the Charlestown Almshouse, though old in construction, and, therefore, difficult to lift to the level of a modern building constructed with special reference to the needs of a pauper institution, is clean, comfortable, well kept and economically administered. By changes gradually brought about most of the men who were formerly there have been transferred to Long Island, while certain women and aged couples have been removed to Charlestown from the Almshouse on Long Island. Of aged couples there are at present in the Charlestown Almshouse nine, beside sixty-one single women and widows.

The changes in the Charlestown Almshouse just described necessarily led to the retirement of Mr. Chandler Eastman, who for many years had been its superintendent, and whose management had been characterized by sagacity and economy.

The Boston Almshouse and Hospital on Long Island.—The principal almshouse of the city of Boston is known as the Boston Almshouse and Hospital on Long Island. The Trustees control the whole of this island, excepting a portion at the northerly end (the extremity of which is known as Long Island Head) belonging to the United States government, and occupied by important harbor fortifications and a lighthouse. Belonging to the almshouse and hospital are two wharves and six principal buildings as follows: (1) An old-fashioned brick building formerly known as the "institution," but now occupied exclusively by men, and, therefore, properly designated as the "Men's Building." In this building, in addition to the inmates' quarters, are the Superintendent's office, the office of the book-keeper, stenographer and typewriter, and various rooms for officers. (2) A large building of wood and plaster construction, often spoken of as the "dormitory," but because occupied, with the exception of the bakery, exclusively by women better described as the "Women's Building." (3) A large hospital of two hundred and fifty beds having the general shape of the letter **E**, *i.e.*, with a principal front or façade, from which extend parallel to one another and at right angles to the façade three wings. (4) A plain, but handsome chapel built of wood, spacious and well lighted. In this chapel religious services are held at different times by Protestant and Catholic chaplains, respectively. (5) A house for the superintendent. (6) A barn large enough for the nine horses and thirty or more cows which belong to the institution. A piggery located at some distance to the south of the main group of buildings, and containing one hundred or more pigs; a carpenter's shop; a morgue, and other small out-buildings complete the list. This group of buildings occupies what may be roughly described as the central portion of the island. At the northern extremity are the fortifications already referred to; at the southern are located the playgrounds used by children brought on picnic excursions by the Randidge Fund, and also the Municipal Camp for Boys inaugurated and maintained for the first time during the past summer. The use of grounds on Long Island for these purposes was granted for the season of 1898 by the Pauper Institutions Trustees, on request of the Mayor. They are referred to more at length in a later paragraph.

No new buildings have been erected during the year, but the expenditure of a very considerable sum for repairs was found necessary, and various alterations and improvements have been made as comfort required or experience demanded. For example, a new milk-room for the sanitary protection and storage of the milk supply has been built in the basement of the hospital. Partitions sub-dividing certain wards in the hospital have been removed, with a great gain in capacity, lighting and ventilation; and four new rooms for officers have been built and furnished in what was formerly the sitting-room of the officers in the men's building. Portions of the external walls of the women's building which had fallen into disrepair or suffered damage by storms — to which this building is from its situation particularly exposed — have been reconstructed at a considerable cost, and numerous changes in plumbing, piping and the like have been made. The limited appropriation granted for the year compelled the strictest economy in every direction, and no appropriation whatever having been made for improvements, little work could be accomplished on the material side in the way of betterment of the institution as a whole. All that could be done was, as far as possible, to prevent deterioration and to carry out minor changes.

The Men's Building. — The men's building while well constructed remains, as it has long been, the least satisfactory of all the buildings on Long Island. It still awaits an adequate system of ventilation such as has been recommended by several successive administrations. In the absence of any such system the crude method of opening windows is the usual resource, and this, especially in the infirmary wards containing the older and feebler men, is often impracticable, because such persons not only require somewhat higher temperatures than those in active middle life, but are also extremely sensitive to drafts of cool air such as usually follow the opening of windows. Over and again the opening of windows in one of these wards has been followed by their immediate closing at the hands of the inmates. If the latter, in the interests of decent ventilation, are forbidden to close the windows they complain bitterly. As a result the air in this building is frequently close and sometimes foul.

One of the most important improvements of the year in the men's building has been the establishment of a convenient and well-lighted storeroom and new refrigerator in one end of the old recreation hall, the latter having been transferred to the basement of the southern extremity of the building. It has repeatedly been urged by the superintendent that a

modern cold-storage plant would be a valuable adjunct to this department, an opinion in which the Trustees heartily agree, and only a lack of funds has prevented them from establishing such a plant. The storeroom is in charge at present of Mr. A. W. Davidson, whose service has now extended over several years. The receiving room is in charge of Mr. Simeon Adams, Receiving Officer, and here the bathing arrangements are primitive, and much in need of renovation. Shower baths, in particular, should be introduced. This while perhaps seemingly of minor importance is really a matter of much consequence, especially to the old and feeble, as bathing must be attended to with regularity and efficiency if the best results are to be obtained.

The laundry is also primitive in arrangements, and deficient in lighting and in space. Much of the laundry machinery is old and should be replaced by newer and more modern apparatus. One large mangle and one metal washing machine have been added to the outfit during the year with a distinct gain in efficiency. The kitchen is also old-fashioned in location and fittings and ought to be renovated.

The last portion of the men's building to which reference need be made is the power-room. The engines, pumps, dynamos and boilers are located in the rear of the men's building, underneath the laundry, and are in an absolutely unsatisfactory condition both as regards themselves and their location. During the past year on one occasion the breaking of a belt and the practical destruction of the switch-board compelled a relocation of the latter, under the auspices of the Electrical Construction Division, at a heavy cost. The whole electrical apparatus has been repeatedly condemned. It is altogether inadequate in amount, imperfect in construction and antiquated in design. We are informed by Mr. Howard of the Engineering Department that it will be difficult, expensive and wholly opposed to economical management to patch up the plant for another year, and it is even doubtful if it could be done at all so as to maintain decent service. An urgent appeal has therefore been made to the Board of Estimate and Apportionment for an appropriation for a new power-house in a better location and large enough to contain boilers, electrical appliances, pumps, laundry, etc., with advantage and economy.

The Hospital Building.— This building is in fairly good repair, and has required during the year comparatively little outlay. It is not anticipated that any considerable sum need be spent upon it during the ensuing year, except for repairs of plumbing and minor alterations. The need of new isolating

rooms, and of special new and additional wards for tuberculous and specific diseases, is, however, very great. New quarters for the accommodation of nurses are also imperatively demanded.

The Women's Building. — The violent storm of November 27, 1898, did considerable damage not only to the trees upon the island (unfortunately already only too few in number), eight of which were uprooted and practically destroyed, but also to the women's building. The heavy caps of some of the ventilators were lifted bodily from their fastenings and carried away, heavy stones were blown from the chimney tops upon the roofs, and other damage was done of a less serious character. The total cost of the repairs made necessary to this building alone was \$607.18.

The need is very great of a considerable enlargement of the dining-room in this building. At present the inmates can be served only in two or three shifts — a most undesirable state of affairs. Better kitchen facilities are also needed, and a special dining-room for the matrons and other officers should be provided.

One of the greatest defects in the whole almshouse is the necessity which compels the Trustees to maintain the general bakery in the basement of the women's building. This makes impossible that absolute separation of the sexes which is so imperative in an institution of this character, and the Trustees have strongly urged upon the Board of Estimate and Apportionment that some provision be made for a modern bakery in connection with a re-establishment of the boilers and power-house. The baker has, however, in the face of many difficulties, succeeded in furnishing an abundant supply of good bread, and credit is due to him for his successful management of the bakery under unsatisfactory conditions. The introduction of a smaller loaf has resulted in a material saving of waste in this department.

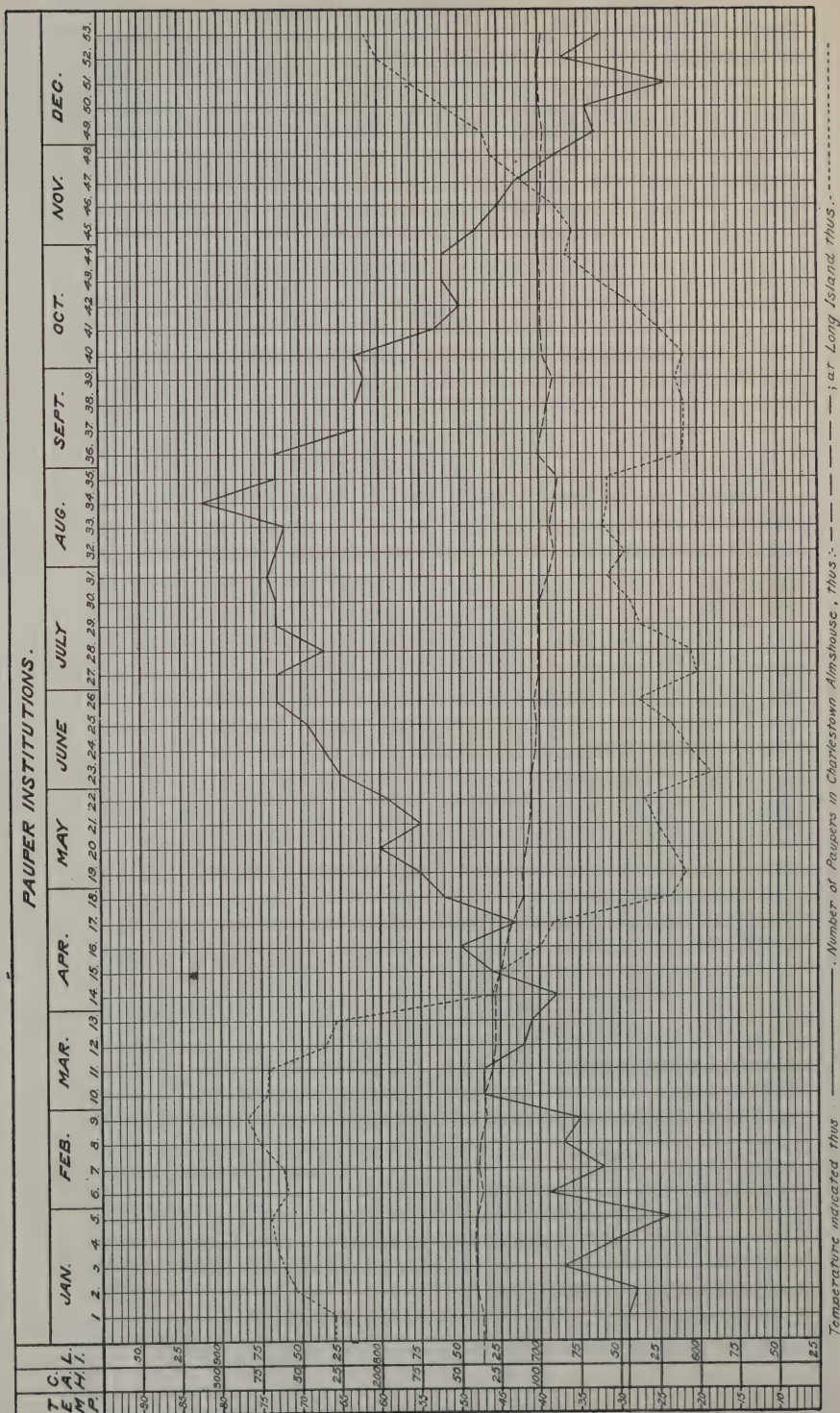
The Wharves. — The November storm damaged the front wharf to such an extent that repairs to the planking and woodwork had to be made at a cost of \$198.22, while the causeway of earth and masonry leading to the wooden part was so far weakened that it has been necessary to contract for its repair at a cost of \$1,240.

New Piggery. — A new piggery has been built in a desirable location to the south of the main group of buildings, and at a small cost. More than 100 pigs are now on hand.

THE POPULATION OF LONG ISLAND.

All the buildings just described are, however, only various and indispensable means to a principal end ; namely, the proper care and treatment of the adult, sane, in-door, pauper population of a great city. This population is generally spoken of collectively as "the inmates," although in addition to the inmates themselves there are in all about seventy-five officers and employees living on Long Island. Certain facts in regard to the inmates are worthy of note. Inasmuch as minors are not sent to Long Island (excepting in the comparatively few cases of young men and women under twenty-one in need of hospital care; and infants too young to be separated from pauper mothers, and who, therefore, come with them), the average age of the inmates, exclusive of infants, is somewhat advanced, having been forty-eight among those admitted during the year under consideration. Any one visiting the island at most seasons of the year must be struck with the fact that the aged and infirm predominate; and this is as it should be, for we have a right to expect that only in cases of age or infirmity shall the necessity of a confession of pauperism, or incapacity for self-support, bring about resort to support at the public charge. On the other hand, we regret to say that a considerable number of persons, not physically infirm or aged, do, as a matter of fact, profess pauperism, and resort to the island, especially in the winter season. The curve of population of the Long Island and Charlestown Almshouses, respectively, has been plotted by the Institutions Registration Department, and by its kind permission is reproduced on the following page.

From this curve it appears that the amount of pauperism in the city varies inversely as the temperature. The fact appears to be that upon a large mass, constituting the permanent population of our almshouses, there rises with the fall of the mercury in the winter season a great wave of increase, which subsides with the rise of temperature in the spring. This winter increment constitutes one of the most serious problems with which we have to deal. In part, it is undoubtedly composed of worthy poor, who, barely able to maintain themselves during the summer, find it impossible to do so under the added burdens imposed by the inclemency of winter; in part, apparently, it is due to a less worthy, but equally unfortunate, number who are victims of the drink habit. Some such, in spite of this habit, are able to maintain themselves during the summer without much suffering from exposure or other sources, such



as overtakes them in winter. For sheer bodily comfort these appear to surrender to the seemingly inevitable, and retreat during the inclement season to a place of protection, and one where they cannot obtain liquor. After both these deductions have been made, however, there still remains a more considerable number of comparatively young and able-bodied persons, who, from lack of courage or incentive, weakly yield to the temptation of real or professed incapacity for self-support, and surrender their active responsibility in order that they may be cared for at the public cost during the inclement season. Some of these are what are technically known as "recidivists" or "rounders."

The "Rounder" Problem.—By a "rounder" is generally understood a person who has made the rounds of various public institutions perhaps many times. For example, such a person in Boston may have served several terms at Deer Island; he may have spent several winters on Long Island; he may perhaps have been in the State Almshouse at Tewksbury; he may have committed petty crimes and "done time" in jail; he has very likely been an inmate of some hospital; and, in rarer instances, he may have spent some time in one of the many insane asylums of the city or the State. In addition, he may also have been an inmate of similar public institutions in other States or cities. It would appear that any one having had an experience of this kind might in any right sense of the word be accurately described as a vagrant, *i.e.*, a wanderer, for if vagrants of this kind are not wanderers upon the face of the earth then surely no one is. It is the opinion of this Board that vagrants of this type are wholly out of place in pauper institutions designed for the care of the worthy poor, and it is our intention to study more closely than has been done hitherto in Boston various aspects of the "rounder" problem in the hope of correcting, if possible, or at least of restricting to some extent, so obvious and so serious a disease of the social organism.

Some phases of the problem are indicated in the following paragraphs from a special report on the admissions of the year, among whom are many vagrants of this type who are constantly passing in and out of public institutions:

A Study of Admissions to the Pauper Institutions of Boston during the Year '98-'99.—In considering the almshouse population we want first to see who come into the almshouse; secondly, who out of all who come in should be roused and stirred to go out again; and, thirdly, who should be persuaded to stay under the protection of the almshouse.

The basis for the following discussion is the total number

of persons admitted to the Boston Almshouses at Long Island and Charlestown during the year February 1, 1898, to January 31, 1899.

Deducting readmissions from the total number of admissions, 1,079, we have 917 individuals admitted, of whom 27 are children, leaving a working basis of 890 adults.

Pauper Admissions, 1898-99.

TABLE NO. 1.—NUMBER, AGE, SEX AND CONDITION OF LIFE.

	MEN.				WOMEN.				Grand Total.
	Under 25.	Between 25-50.	Over 50.	Total.	Under 25.	Between 25-50.	Over 50.	Total.	
Single.....	20	230	47	297	13	39	33	85	382
Married....	1	46	45	92	2	46	34	82	174
Widowed.. ..		46	77	123	.....	28	115	143	266
Separated. .		11	5	16	.....	9	6	15	31
Deserted...	1	4	2	7	1	11	6	18	25
Divorced ..		3	5	8	.....	3	1	4	12
Total.....	22	340	181	543	16	136	195	347	890

One hundred and eighty-four men out of 543 (or 33.8 per cent.) were admitted for the first time.

One hundred and eighty-five women out of 347 (or 53.3 per cent.) were admitted for the first time.

TABLE NO. 2.—NUMBER OF TIMES ADMITTED TO ALMSHOUSE.

	1st. time.	1-10 times.	10-20 times.	20-30 times.	30-40 times.	40-50 times.	50+ times.	Total.
Men.....	184	204	94	30	23	7	1	543
Women	185	125	24	10	3	.....	.....	347
Total.....	369	329	118	40	26	7	1	890

It will be seen (see table No. 1) that 514 individuals (362 men and 152 women) or 57.8 per cent. of the whole number admitted, were under 50 years of age; but while 195 women, or 56.6 per cent. of the women admitted were over 50 years

of age, only 189 men, or 33.8 per cent. of the men admitted were over 50 years of age.

Two hundred and fifty single men under 50 years of age have been admitted during the year, or 84 per cent. of the whole number of men, while only 52 single women under 50, or 15 per cent. out of a total number of 347 women have been admitted.

There are evident reasons why more than half the persons admitted into the almshouse are between twenty-five and fifty years of age. Many people and many societies are interested to help young men or women under twenty-five, even if they have made a poor start in life,—every one wants to see them do better, and is still hopeful of their future. For old people special homes are open. They may have children who will support them if poor, and protect them if weak; advancing years make them less likely to ramble off and drink, if that be their temptation, and so they are less likely to bring trouble into the household of a son-in-law or daughter-in-law. Of the married and widowed old men and women in the almshouse, a large number are childless, or have lost knowledge of their children's whereabouts, if their own stories are to be believed.

But between twenty-five and fifty lie the years when the inefficient or intemperate man or woman is most troublesome and least appealing.

There is also an obvious reason why only a small number of widowed women between the ages of twenty-five and fifty are taken into the almshouse, widowhood being frequently the immediate cause of dependence. The Overseers of the Poor and private charity carry along temporarily many young widows with growing children, and this large group of persons who must be helped is thus withdrawn from possible entrance into the almshouse. Broadly speaking, one can safely assume that no widow who has young children comes into the almshouse, unless she is known to be a drinking woman or to be otherwise unfit to make a home for them.

Seventy-nine per cent. of men admitted and 36.6 per cent. of women are recorded as intemperate,* 62.8 per cent. of whole number of persons admitted. Forty-six and seventenths per cent. of the men admitted have been in penal institutions, 22.3 per cent. of the women admitted, 36.7 per cent. of whole number of persons admitted.

*The record of intemperance is made either from knowledge of commitments or from present investigation, or from the applicant's own statement.

TABLE NO. 3. — RECORD OF INMATES AND PARENTS.

	PREVIOUS RECORD OF INMATES.			PREVIOUS RECORD OF PARENTS OF INMATES		
	Recorded as Intemperate.	Previously in Penal Institutions,	Aided by Overseers of Poor.	Father or Mother aided by Overseers of Poor.	Father or Mother previously in Almshouse.	Father or Mother Insane.
Men	432	254	111	42	40	11
Women	127	73	129	8	14	4
Total	559	327	240	50	54	15

Forty-four per cent. of all the men and women admitted went at once into the hospital; 56 per cent. into the two dormitories. Of those entering the hospital, some were probably soon discharged into the dormitories, but, to set against that, others first admitted into the dormitories went within a few days into the hospital. Only 26.5 per cent. of the whole number entering are certified as able to work; with 11.2 per cent. certified as able to do light work, this gives us 37.7 per cent. of our entering population physically able to work. Supposing this 37.7 per cent. "able to do some work" to be dwellers in the two dormitory buildings, into which went 54 per cent. of admissions of the year, we should have 16.3 per cent. of infirm and weak old people admitted to the dormitories too feeble to work, though not needing hospital care.

TABLE NO. 4. — DESTINATION IN ALMSHOUSE AND ESTIMATED WORKING CAPACITY OF 890 PERSONS.

	Admitted to Dormitories.	Admitted to Hospital.	Certified Able to Work.	Certified Able to do Light Work.	Not required to Work.	Total.
Men	368	175	182	67	294	543
Women	131	216	54	33	260	347
Total	499	391	236	100	554	890

TABLE NO. 5.—PHYSICAL AND MENTAL WEAKNESSES AMONG 890 PERSONS ADMITTED TO ALMSHOUSE, IN MOST CASES DISQUALIFYING FOR STEADY AND SELF-SUPPORTING WORK OUTSIDE.

	Old Age or Chronic Illness.	Temporary Illness.	Maimed, Lam e, Deformed, Blind, Deaf, etc.	Feeble-Minded or Demented.	Mentally Weak.	Developed Insanity and Committed to Asylum.
Men	154	100	52	20	26	5
Women	164	75	53	9	46	14
Total	318	175	105	29	72	19

Thirty-six per cent. of those admitted are incapacitated for steady work by chronic illness or old age; 12 per cent. are in some way disabled (deformed, lame, partially blind or deaf, etc.): 13 per cent. suffer from some form of mental disability. Under the general heading Chronic Illness, in Table 6, are included 112 persons suffering from consumption, 62 cases of specific disease, and 45 persons paralyzed or bed-ridden. These different categories of disability overlap each other and cannot be added into totals; a man may be disqualified for active work by old age, being also deaf and lame, or a woman may be feeble-minded and consumptive.

TABLE NO. 6.—COMPARISON OF THE 890 ADULTS ADMITTED TO THE ALMSHOUSE DURING 1898, WITH THE 369 ADULTS (INCLUDED IN THE ABOVE 890) WHO WERE ADMITTED FOR THE FIRST TIME.

	Over 50 years of age.	Went at once into Hospital.	INCAPACITATED BY			Died.	Readmitted during year.
			Chronic Illness or Old Age.	Maimed, Lam e, Blind, etc.	Some Form of Mental Weakness.		
890 admissions	33%	44%	36%	12%	13%	11%	15%
369 first admissions.....	44%	69%	43%	17%	20%	19%	4%

The comparison (Table No. 6) of the general percentages of the 890 adults admitted to the almshouse during 1898, with the special percentages of those 369 adults (included in the 890) who were *for the first time* admitted during 1898, indicates that through the Institutions Registration Department, who at present act as our agents for admission, we are now receiving into the almshouse those persons who most stand in need of indoor relief; the old, the sick and the disabled; while the small number of recidivists, among those first admitted in 1898, may mean that we are admitting but few of the men and women who tend to form the "in and out" class, although twelve months is too short a time from which to draw safe conclusions. (Compare Table No. 2.)

Of the 521 persons who have been admitted to the almshouse during the year, but not for the first time, many first entered in the years prior to 1892, when the Settlement Clerk was given no facilities for investigation in the home, and when his decision whether to admit or refuse an application was necessarily made on the applicant's own story and appearance, supplemented in some cases by the records of the Overseers of the Poor. It is clear that greater discrimination is now exercised than was possible in former years, and this is also indicated by comparison of certain figures in the report of the Mayor's Special Committee (1892) with the corresponding figures during 1898. (See Table No. 7.)

TABLE NO. 7.—COMPARISON OF FIGURES FROM FINAL REPORT OF MAYOR'S SPECIAL COMMITTEE (1892) WITH FIGURES FROM REPORT OF 1898.

	Number of admissions.	Individuals represented.	Admitted more than once during year.	Percentage admitted more than once.	Admission for first time.	Percentage of first admissions.	Population of Boston in 1891 and 1898.	Families helped by Overseers of the Poor in 1891 and 1898.
1891								
Almshouses, Long and Rainsford Islands.....	1,273	973	300	23.6	506	39.8	457,772	Jan. 1, to Dec. 31, 13,647
1898								
Almshouse, Long Island..	1,034	874	160	15.5	358	34.6	541,827	16,377
Decrease or Increase, 1898,	-239	-99	-140	-8.1	-148	-5.2	+84,055	+2,730

The present population of the almshouse on Long Island should be compared with that of Long and Rainsford Islands in 1891. This table does not cover admissions for either year to Charlestown Almshouse, to which fewer persons were admitted in 1898 than in 1891.

TABLE No. 8. — STUDY OF 184 MEN ADMITTED TO ALMHOUSE, FOR FIRST TIME, BETWEEN FEBRUARY 1, 1898, AND JANUARY 31, 1899.

AGE.	CONJUGAL CONDITION.						HABITS.		DEPENDENCE.						DESTINATION.		INCAPACITATED BY						SOME FORMS OF CHRONIC ILLNESS.				REPORT ON JAN. 31, 1899			
	Single.	Married.	Widowed.	Divorced.	Separated.	Deserted.	Intemperate.	Have been in Penal Institutions.	Aided by Overseers of Poor.	Parents, aided by O. P.	Parents in Almshouse.	Former inmate Marcella-St. Home.	Have Dependent Children.	Admitted to Dormitory.	Admitted to Hospital.	Chronic Illness or Old Age.	Maimed, Blind, Deaf, etc.	Feeble-minded or Demented.	Mentally Weak.	Insane Now, or Formerly.	Consumption.	Paralyzed or Bedridden.	Specific Disease.	Died.	Discharged.	Remaining.	Readmitted.			
25...	15	1	...	...	...	1	5	7	4	2	3	2	...	5	12	6	...	3	1	1	1	1	...	4	...	6	11	...		
25-50...	56	19	16	1	3	2	78	35	14	16	2	...	...	42	55	40	14	1	5	2	29	1	7	19	31	47	6			
50+...	16	24	23	2	4	1	31	11	21	...	...	...	...	34	36	35	16	8	6	3	5	11	...	13	16	41	5			
	87	44	39	3	7	4	114	53	39	18	5	2	...	81	103	81	30	12	12	6	35	12	11	32	53	99	11			

TABLE No. 9. — STUDY OF 185 WOMEN ADMITTED TO ALMHOUSE, FOR FIRST TIME, BETWEEN FEBRUARY 1, 1898, AND JANUARY 31, 1899.

AGE.	CONJUGAL CONDITION.						HABITS.		DEPENDENCE.					DESTINATION.		INCAPACITATED BY						SOME FORMS OF CHRONIC ILLNESS.				REPORT ON JAN. 31, 1899			
	Single.	Married.	Widowed.	Divorced.	Separated.	Deserted.	Intemperate.	Have been in Penal Institutions.	Aided by Overseers of Poor.	Parents, aided by O. P.	Parents in Almshouse.	Former inmate, Marcella-St. Home.	Have Dependent Children.	Admitted to Dormitory.	Admitted to Hospital.	Chronic Illness or Old Age.	Maimed, Lame, Blind, Deaf, etc.	Feeble-minded or Demented.	Mentally Weak.	Insane Now, or Formerly.	Consumption.	Paralyzed or Bedridden.	Specific Disease.	Died.	Discharged.	Remaining.	Readmitted.		
—25...	13	2	.....	.....	.....	1	1	.....	2	8	.....	1	1	.....	16	.....	.....	1	4	.....	1	.....	5	1	7	8	.....		
25-50..	21	29	14	1	4	6	31	13	18	6	2	.....	3	8	67	34	7	4	2	4	17	8	9	13	26	34	1		
50+...	17	20	63	.....	3	1	19	7	41	.....	2	.....	6	25	69	44	28	21	3	5	7	19.	3	23	30	43	6		
	51	51	67	1	7	8	51	20	61	14	4	1	7	33	152	78	35	26	9	9	25	27	17	37	63	85	7		

When we find of our 890 persons admitted to the almshouse during the year that

- 391 need to go at once into the hospital,
- 318 are incapacitated for steady work outside the almshouse, and therefore for self-support, by old age or chronic illness,
- 105 are maimed, or lame, or partially blind, deaf, etc.,
- 120 are in some way mentally disqualified,
- 559 are recorded as "intemperate,"
- 327 have been inmates of penal institutions,

it is clear that we cannot simply say to such a population, "Stop drinking; stand on your feet and work." Obviously, only a small number are capable of responding to the appeal, whether put crudely or with all the tact in the world. A man may be maimed, or may be suffering from chronic illness, and yet if he be of resolute will and good character he can make his work valuable, and it will have a recognized market price; or, on the other hand, he may be of drinking habit, yet if he be strong and healthy his work will still be wanted and will have its market price; but the chances of work are few for the maimed or sick man or woman of intemperate or degraded habit. (See note.)

We have spoken of men and women as "intemperate," and enumerated their commitments to penal institutions without regard to their early associations and hereditary weaknesses or inclinations. No moral judgment is attempted, only the statement of certain facts, and by no means all the

NOTE.—MEMORANDA OF 35 MEN RATED AS "ABLE TO WORK," OR "ABLE TO DO LIGHT WORK."

15 are found to be impaired in health, suffering from rheumatism, hernia, heart disease, etc.

8 are maimed or crippled, or have defective eyesight, etc.; these injuries are not all serious, but are to some extent disqualifying.

9 are both sick and maimed, crippled, etc.

3 appear to be able bodied.

35

28 ($\frac{4}{5}$ of the whole number) are stated to be intemperate.

5 are said to be "intemperate at times."

2 may be accounted temperate; one of these has been insane; the other, at 36, has been twenty times in the almshouse.

35

One of the 35 men has a marked pauper-history. His mother died at Rainsford Island Almshouse. His wife had been an inmate of the almshouse, and is now at Long Island; of his six children all were born and five died at Deer Island, Rainsford Island or Long Island.

Only 10 can be said (from record) to have learned a trade.
25 are recorded as laborers, teamsters, etc.

In all, 32 out of 35 have some physical disqualification.

1 is feeble-minded.

2 appear unsound mentally, though not insane.

2 have relatives insane.

3 have been at the Massachusetts Hospital for Dipsomaniacs.

determining facts;* nor is the attempt made in this brief report to discriminate between the principal and contributory causes of dependence. The number of individuals is small, and the data imperfect, especially about those who first entered the almshouse in the years before 1892.

Here, then, is the picture of our almshouse population, or at least of such facts of their lives as have got themselves recorded — happily, in many dwellers in the almshouse exist capacities for usefulness under guidance, and qualities of friendliness, unselfishness, patience and devotion which are unrecorded.

Those who should *leave* the almshouse as soon as possible are, as a rule, though not invariably, drawn from the group whose almshouse history is shortest. This group includes:

(a.) Those men and women who have come for hospital care during temporary illness, and who should, as soon as possible, get into active work; their chance of this lessens with each week of almshouse life after recovery. Among these are the women of ordinary mental capacity, coming for confinement, for some of whom places at service with their babies, can be found.

(b.) Those who might be cared for by relatives.

(c.) Those among the "incapables" or disabled who can piece out their incapacity by faithfulness, and who are at times able to work, though only under patient employers.

(d.) Those who may be counted as able-bodied, intemperate, irregular workers, who should not be allowed to use the almshouse as a free home, in which to recover from debauch.

Among those who should be persuaded to *stay* are:

(a.) The mentally weak (especially the young women) who are not so markedly feeble-minded as to be fit subjects for the Custodial Department of the Massachusetts School for the Feeble-Minded at Waverly.

(b.) The helpless drinkers who cannot protect themselves from temptation, and whose life outside the almshouse is an alternation of drinking, arrests and commitments.

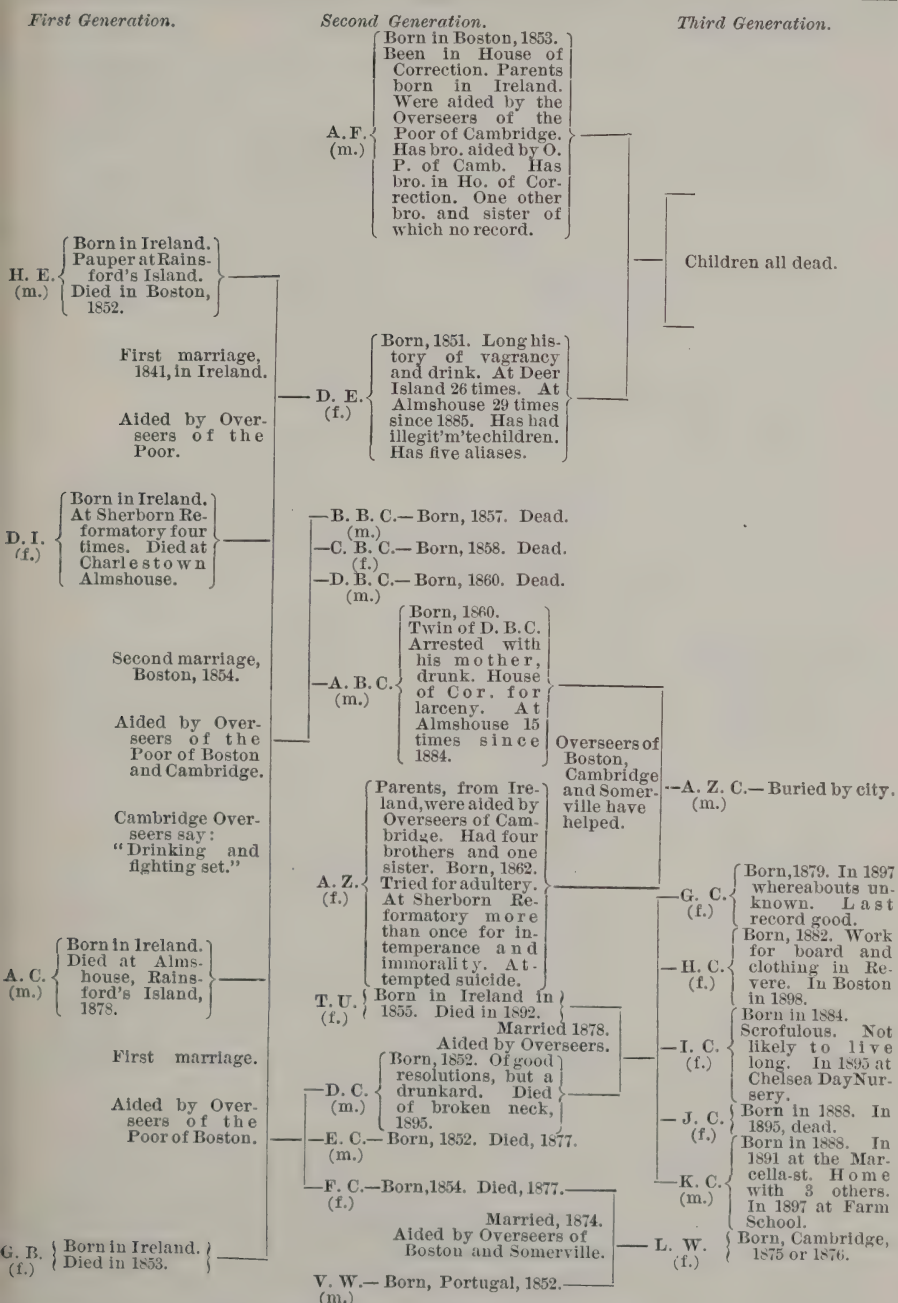
(c.) Elderly infirm people without responsible relations.

One cannot look into the antecedents of an almshouse population without coming across some of the tangled and

* "A statistical analysis of a concrete mass of poverty or pauperism will probably give more light concerning the subjective causes of poverty than the objective causes. In dealing with individuals, their character is apt to be more studied than their environment. Even when environment is the primary cause of poverty, the immediate cause or co-ordinate result is often deterioration of character. Sickness is more obvious than bad sanitation; laziness than a malarial atmosphere; inefficiency than a defective educational system."—*American Charities, A Study in Philanthropy and Economics*, by Amos G. Warner, Ph.D., page 29.

interwoven threads of pauper and semi-criminal and defective relationships. Three such instances are given in the tables on the following pages, one of which leads back to a home in the old Crystal Palace building on Lincoln street. It is only in retrospect that we get full sight of the ramifications from such centres of degenerate life; although they should not be accepted as representing frequent conditions, it is worth while to study them with care, so that if possible in the case of persons of similar tendencies now coming into and going out of the almshouse, through the full co-operation of all municipal, educational and philanthropic organizations which touch these lives at any point, we may set some check to the contagion. There is already a natural check to it, if we can trust the general evidence of our records, as an examination of the cases of pauperism in the second generation shows a tendency to elimination by infertility and early death.

FAMILY HISTORY OF A. B. C. AND HALF-SISTER, D. E. F.; AT
LONG ISLAND, JANUARY, 1899.



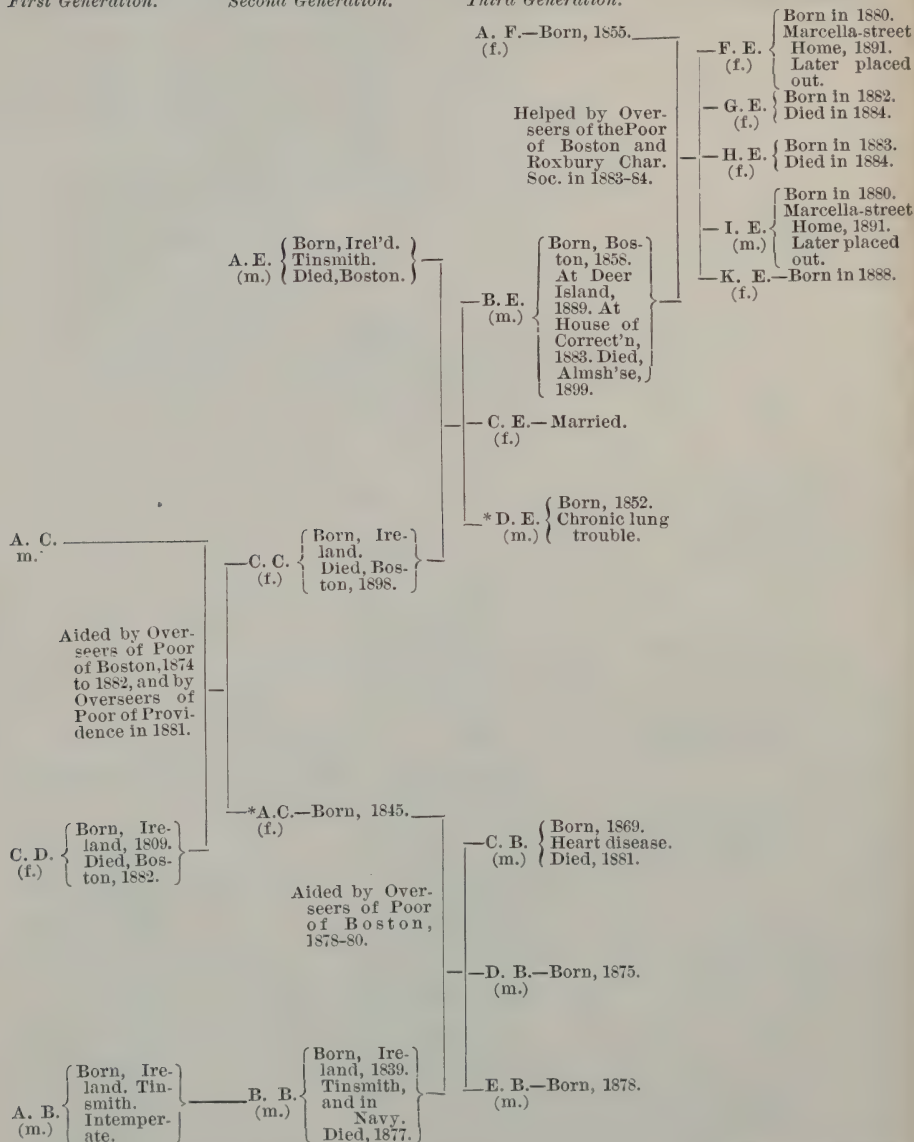
HISTORY OF TWO FAMILIES, OCCUPANTS OF THE "CRYSTAL PALACE," FORMERLY A LINCOLN-STREET TENEMENT HOUSE.

First Generation.

Second Generation.

Third Generation.

Fourth Generation.



Nephew and aunt lived together in Boston
for years. No record of marriage, but
children born as indicated.

F. B.—Born, 1883.

G. B.—Born, 1886.

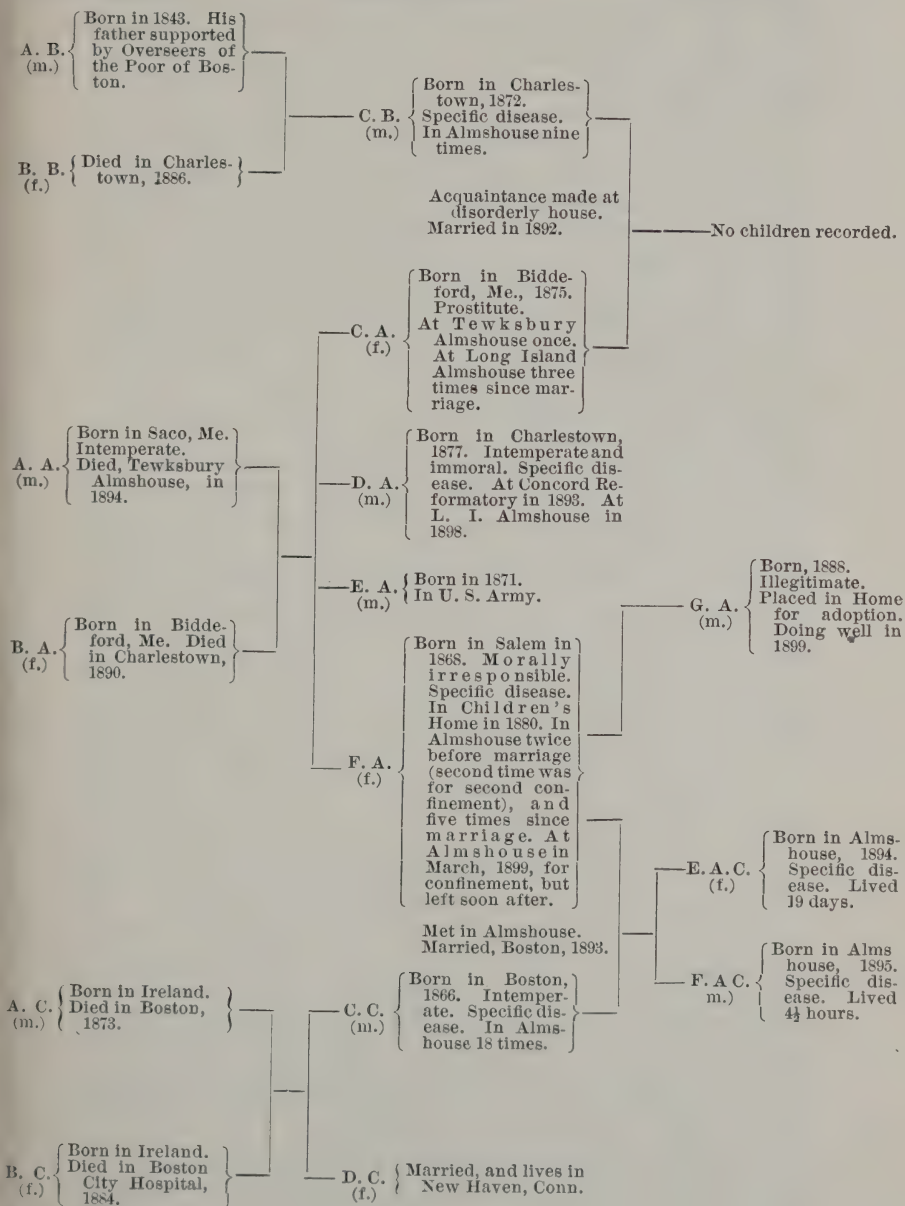
Both children supported in Salem at expense of Boston.

HISTORY OF A FAMILY (A) AND ITS INTERMARRIAGE WITH
FAMILIES (B) AND (C).

First Generation.

Second Generation.

Third Generation.



Occupation. — We must accept the fact that for a part of our population their only prospect is life in the almshouse. For them occupation there under decent and orderly conditions should be provided even when they are incapable of productive work. Great credit should be given to those officers of the almshouse who have, with unobtrusive patience and ingenuity taught some of these men and women to do well work requiring some skill, while in their lives outside no one had had the perseverance to teach them to do anything.

Many men and women leave the almshouse the better physically for their stay in the hospital — we should unceasingly try to do as well by those whose weakness is mental or moral.* Unless our efforts towards this end are unremitting, we are open to the charge often made against almshouses; namely, that they send forth again into the community men and women rested and recuperated after a period of drinking or dissipation, more able than before to be an injury to society, because no moral gain has accompanied the physical improvement.†

That portion of our population who may look forward to active life outside the almshouse we ought to send out the better for their stay inside; the weak wills strengthened, the bad habits checked and possibly corrected, and at least some good habits of cleanliness and order and industry established. But to break up a bad habit is perhaps the greatest conquest we can make in life. We cannot expect to make this conquest for others by repression for a time, and good counsel. Unless we can capture the interest — make something else appear more attractive, more to be desired — so that whatever will a man or woman has works with us instead of against us, advice and appeal are as likely to do harm as good. An outward respect will be paid with an inward reservation, and this process is a hardening one.

We must “empty by filling” and by interesting a man in some sort of progressive industrial work make it less attractive to him to sit idle and to smoke and play cards.

With the two-fold physical and moral disqualifications of

*“The care shown by buildings and grounds should be simply an indication of the presence of that which is infinitely more important—a prompt, never-ceasing and intelligent application of every resource afforded by medicine, hygiene, nursing and personal attention to the particular needs of each patient, from the moment of his admission until his discharge. In short, from the highest official to the lowest there should be a recognition of the individuality of each patient, and an honest pride in standing as the representative of a great city in the execution of its purpose to relieve the needs of its humblest citizens.”—*Report of Standing Committee on Municipal and County Charities, 25th National Conference of Charities and Correction, New York, May 18-25, 1893. By Homer Folks, Chairman. Pages 9-10.*

†The Final Report of the Special Committee (appointed by the Mayor to inspect Public Institutions of Boston in 1892) speaks of “The great extravagance of sending criminal and vicious persons backward and forward recruiting them again and again in hospitals, and subjecting the public to the terrible risks of moral and physical contagion which they carry with them.”

many of our men and women, it will need deliberate teaching of a high order to help our people, and re-enforce weak characters instead of simply retaining them for a while and discharging them unhelped. We need this teaching not only for those who may be pricked into some effort to leave an institution which is no longer a place for idleness, smoking and card-playing, but also to render brighter and happier the lives of those who will probably never again support themselves or be supported outside the almshouse.

We need, in both Men's Building and Women's Building, a teacher whose business it should be to set every unemployed person at work, even at the cost of labor, time and ingenuity. The very presence of so many feeble unoccupied persons is one cause of the low standard of work in an almshouse. It creates an atmosphere of idleness against which it would be difficult for the most energetic person to struggle. It is like close air, and is as poisonous in its effects.

We cannot blame our feeble people for not doing the housework or farmwork of which they are incapable, but we are much to blame if we do not keep them occupied. In the small amount of teaching done in the two buildings this year we have seen instances of the advantages of ingenuity thus bestowed.

A little demented woman, hitherto unoccupied, and often unhappy, has been proud of tying knots in carpet worsted to be knit into a rug; a young blind woman has wound all the worsted knit by the others. Another blind woman has done a great deal of knitting, evenly and well and with infinite patience, while a friend of hers has often sat by and helped her to make sure that no stitches were dropped.

This is only carrying further such work as some of our officers have already done from their interest in the people under their charge, but to fully develop it, it should be the special work of well-qualified persons. It would mean so much for the moral and industrial atmosphere of the almshouse that in our opinion it would justify the added expense of salary and maintenance of a teacher in each of the two dormitories. This teacher should be qualified to carry on also an evening school, on certain evenings of the week, and to teach singing.

Support by Relatives and After-care. — In a number of instances relatives have been seen or written to in the hope that they would give support to inmates. The only success met with has been when such appeal has been made before the admission of the dependent person; after admission, a relative is not likely, from outside suggestion, to assume

support willingly, though many cases occur where relatives voluntarily ask the discharge of inmates, and in one instance our agent and superintendent, by tact and careful management, brought about a family reconciliation, so that an old man who had recently come into the almshouse saying that he would have nothing to do with his daughter, went happily home with her.

In most of the cases where relatives were seen it was apparent that they had no wish to shirk the material support of a father or mother, but that it was the disgrace for wife and children or for husband and children which was keenly felt. Some elderly women in the almshouse have sons who are children of a first marriage. According to their own story these sons had been pushed off and neglected; they had had to "do for themselves" from the time they were twelve years old, and the feeling of affection and duty toward the mother had been much weakened.

In several instances a man who showed grief and mortification at having a mother in the almshouse has yet felt that he could not have his wife made miserable nor his children put to shame by his mother's drinking habits.

In some instances where one might have expected relatives to be interested to help, their unreadiness has appeared to arise from lack of means to provide special care for the old man or woman. Where each member of the family who can work must work for the week's income, no one can be spared to watch over the old grandfather or grandmother; and if he or she is unsound in mind, or has a disabling illness, or craves something to drink, the difficulty is increased, and there is actual danger of fire or accident in the little home. Inability to provide a separate room, or even a separate half of a room, makes it harder to welcome into one's household an old and sick relative. This is not said to excuse unfilial conduct, but is only offered as a statement of difficult conditions.

The attempts at after-care have been very humble. In only a small proportion of cases can such attempts be made, as many men and women are unwilling to keep in communication with us, and at any time the slender thread of communication can be snapped at will. From time to time we have greatly wished that we could promptly follow up a person who has left us while the impulse to do his best is still strong upon him and can be laid hold of to help him into work.

We have received the constant and helpful co-operation of the related departments, and valuable help has been given by

the Associated Charities, the Society of St. Vincent de Paul, the Industrial Aid Society, the Working Girls' Home (Grey Nuns), St. Luke's Convalescent Home, the House of Mercy, the Hospital of the Holy Ghost, and other organizations and individuals. It has been only necessary to say that in this or that way help can be given to the city to receive most generous and prompt assistance.

Even with all this ready co-operation, we cannot secure adequate after-care without additional assistance in the Boston office.

Commitment for Vagrancy. — A very large proportion of men and women in our almshouse are habitual drinkers. If they are outside of institution restraint or the restraint exercised by a temperate and resolute wife or husband, they are sure to drink. Such a person, unless he has been stirred to efficient exercise of his own will by religious conviction, or can be upheld by a friend who stands close by him in daily life and work, is helpless before the slightest temptation.

It is better for the community and for himself that such a person should remain under control, but it is difficult to secure a permanent stay. From time to time he becomes restless and asks and receives discharge, as there is no power of legal detention in the almshouse. Within ten days, sometimes within twenty-four hours, he asks readmission. Often he comes, in a pitiful condition from the effects of drink, saying that he is sick and obviously temporarily unfitted for work. For the individual as well as for the community, it would be well if, in the cases where there is a long record of commitments to the House of Correction and of admissions to the almshouse, the individual could be arrested as a vagrant and sent to the State Farm on an indeterminate sentence, or on a long sentence to the House of Correction.

The standard of daily work at the State Farm and the House of Correction is, of course, higher than it can be in any almshouse where there is a constant depression of the standard through the low physical condition of the greater proportion of inmates. There are many men between twenty-five and forty whose chance of recovery would surely be greater under the more exacting discipline of a penal institution than under the almshouse conditions terminable at will.

We believe that vigorous enforcement of the laws against vagrancy would be more efficacious in ridding the almshouse of able-bodied loafers than the establishment of a workhouse. The law already gives us the power to ask for arrest and commitment of an inmate who refuses to work after being certified by a physician as able to work.

Classification. — In the way of classification, to protect the younger persons who come into the almshouse from the influence of those who have sunk into apathy and degeneration, and whose past histories have been in every way unfortunate, it is clear that we ought to accomplish more separation than is at present the case, but the difficulties to overcome are great. A general classification on the basis of age is difficult to arrange on account of the differing physical conditions. The classification on the basis of past record is sometimes complicated by the great difference in working capacity and willingness to work.

Not infrequently the man or woman whose life outside the institution has been bad is a ready and willing worker, especially if he or she has been under prison discipline, and the chances are only too many that in getting the necessary work of the almshouse done, all who are ready to work, whether young and inexperienced or the reverse, are thrown together. Officers naturally like a willing worker, and the work, willingly done, makes a change for the time being in the worker. The regular life, the sense that one is contributing to the orderly administration of a large institution and that the efficiency of one's work is recognized and valued, will sometimes so soften and refine the expression of a face, that it is hard to recognize in the institution the person you have seen under different circumstances outside. The respectable man or woman on the other hand is in many cases crotchety or ill-tempered and difficult to get on with. Often this has been the determining cause of dependence.

The two dormitories have been built on the congregate plan, with large wards. To provide any efficient classification, we should by some readjustment secure two or three employment-rooms, and every effort of Superintendent and officers toward breaking up almshouse stagnation should be supported.

Perhaps the best basis for classification would be the number of admissions to the almshouse.

If a man enters the almshouse for the first time even at thirty or forty instead of twenty, we should make more effort to get him at once on a healthy footing of energetic work than for the young man of twenty-eight who has already been twenty times in the almshouse; who began a delinquent life at fourteen, and who since then has been frequently committed to penal institutions.

Do what we will, we cannot ensure individual care and effort for every inmate; we must do as surgeons on a battlefield would do — put forth our best strength for the "helpable" cases, and then do what we can for the others.

THE WAR WITH SPAIN.—ANTICIPATED RETREAT TO THE MAIN LAND.

When it became evident that war with Spain was imminent, and the possibility of the appearance of a Spanish squadron off Boston Harbor was recognized, it was perceived that owing to the exposed position of the Pauper Institutions on Long Island and their proximity to the United States fortifications on Long Island Head, it might become necessary to remove the inmates to the main land. Accordingly, active inquiries were instituted among various institutions, public and private, in Boston and vicinity, which elicited most gratifying hospitality on the part of a number of such institutions. The State Board of Charity; the various Boards of Overseers of the Poor of Boston and vicinity, including Cambridge, Malden, Brockton, Woburn, Milton and others; the City Hospital and the hospitals in Newton and Waltham; the Trustees for Children, who offered to put at our disposal the Marcella-street Home; the Free Home for Consumptives, and various other authorities and institutions kindly tendered their aid. The Pauper Institutions Trustees desire to make grateful acknowledgment to all who thus offered assistance. Although it did not prove to be necessary to accept their aid, their readiness to co-operate was highly appreciated.

The Hospital.—*United States Soldiers.*—The year at the Long Island Hospital has been an eventful one. As soon as it became evident to the United States authorities that it would be desirable to remove to well-established hospitals on the eastern coast of the United States sick or wounded soldiers from Cuba and Porto Rico, provision was made for the reception of as many as possible in the Hospital on Long Island. Owing to the fact that the number of inmates in the hospital in summer is somewhat less than at other seasons, it was possible, by making certain changes, to set apart for the use of United States soldiers one entire wing of the hospital, and on the 13th day of September last a detail of sixty-one United States soldiers, almost all of them members of the regular army, was sent to Long Island for care and treatment, notice having previously been given that they might be expected.

It was decided that the best place in which to care for the soldiers was in the middle wing, where they could be more isolated from the other inmates of the Hospital, and could also receive better care.

The wards were *thoroughly renovated* and made ready for the soldiers, a large supply of additional garments and linen

being provided by the Volunteer Aid Association. It is gratifying to know that although many of the soldiers were seriously ill at the time they were sent to Long Island (thirteen of them having typhoid fever and many others suffering from malarial fever) not a single death occurred. To the untiring devotion of the visiting staff, and the faithful care of the resident physicians and nurses this desirable and fortunate result is largely due, and the Trustees gratefully acknowledge their services. The soldiers expressed themselves as highly gratified with the treatment they received.

Nursery.—After the departure of the soldiers it was decided to remove the nursery for children from the lower wing of the hospital to the middle wing, as the children could thus be entirely isolated.

The change in the appearance of the nursery shows the wisdom of this experiment. The children have a large, airy ward entirely to themselves, and there is no occasion for any one to cross it, as was the case in the ward which they previously occupied. The healthy and well-nourished condition of the children is apparent, and they would compare favorably with children outside of an institution.

Training School for Nurses.—There is one marked step of progress which has been made in the Hospital Department; this is in the grade of young women who come to the hospital for training. Among the pupils and those who have already graduated, there are many who reflect credit on the profession to which they belong, and nothing will so greatly tend to raise the character of the hospital as to have a fine class of nurses who are willing to be trained, and who may afterwards become head nurses in this institution.

Library and Reading-room.—During the year the library and reading-room have received important additions, and have been largely used both by officers and inmates. The Trustees are especially indebted to Mr E. W. Forbes for his devoted and intelligent aid in its arrangement and supervision, and for his gifts in books, both of which were freely given without cost to the city. Many sets of some of the best magazines and periodicals were presented by Mr. E. C. Marshall, Penal Institutions Commissioner, who has also completed from duplicate copies in the Penal Institutions Department some of our sets in which there were gaps. In addition, the Trustees desire gratefully to acknowledge the assistance of the Penal Institutions Department in the binding of several hundred volumes at a nominal cost.

The number of men who borrowed books from May 15, 1898, to April 1, 1899, was 213. The number of books loaned was 2,074.

Fiction,	1,510	History,	42	Poetry,	32
Travel,	102	Religious,	29	Miscellaneous,	12
Biography,	99	Science,	11	Magazines,	237

This does not include books loaned to women or officers, which would make the total number about 2,500.

The Farm and Dairy.—Fresh milk in abundance is a great desideratum in an establishment like that on Long Island, and especially for use in the hospital. During the last two seasons a considerable loss has taken place from the spoiling of milk on the way to the island or almost immediately after its arrival. The experience of the last two years having shown that it is impracticable to have on Long Island a model farm of large size on account of the scarcity of effective labor in the summer season, it has been decided to restrict somewhat the areas under cultivation and to direct the efforts of the Farm Department to the growing of fresh vegetables, celery, lettuce, onions and the like, and to hay and pasturage for a considerable dairy, rather than to undertake, as heretofore, a larger area under cultivation for crops such as corn and potatoes. In pursuance of the policy of making the farm essentially a dairy farm, an application has been made to the Board of Estimate and Apportionment for funds for an enlargement of the barn.

Randidge Picnic Excursions for Children.—On the request of His Honor the Mayor, the use of a portion of Long island was again granted by the Trustees for picnic excursions for poor children, provided under the Randidge Fund. These excursions were conducted under the management of the Penal Institutions Commissioner, the children being taken to the rear wharf and restricted to a portion of the island remote from the Pauper Institutions buildings. Better provision was made this year than in the previous year for games and bathing and, by the construction of suitable shelters, against rain and for places for refreshment. In his annual address to the City Council, delivered on January 2, 1899, the Mayor refers to these excursions as follows:

“During the last summer season 13,540 children were given a day's outing on Long Island, including a luncheon and facilities for bathing, at an aggregate expense of about \$2,600—\$2,000 of this amount being the income of the Randidge Fund for last

year, and the remainder an unexpended balance from the income of the fund for the previous year. These excursions, carried without an accident and at an average expense of only fourteen cents for each child, afford a striking example of the widespread beneficence which can be accomplished, under proper management, by the use of the facilities which the city is able to supply. Such a record could not, I believe, be duplicated, or even approached, by any private charitable organization, and I have taken some pride in demonstrating, partly as an encouragement to others to follow his example, the wisdom of the donor in placing this somewhat unique bequest in the hands of the city. Last year the children were in nearly all cases furnished also with free transportation by special electric cars from the immediate vicinity of their homes, through the liberality of the Boston Elevated Railway Company, which contributed as many free tickets as were required for this purpose. The various churches of the city were invited to organize excursions, and to furnish volunteer committees to take charge of the children, and nearly all of them were carried out in this manner. If these excursions are to continue to go to Long Island, it is very desirable that a pier should be constructed adjacent to the picnic ground so that the children may be landed at a point much nearer to their destination than is now possible."

Municipal Camp for Boys. — A Municipal Camp for Boys was also established during the summer upon the higher land of Long Island Head still further away from the Pauper Institutions than the playgrounds used by the Randidge Picnic Excursions for Poor Children. Permission to establish this camp upon Long Island was cheerfully granted for the season by the Trustees on the request of His Honor the Mayor, and the experiment proved to be an unqualified success. In his annual address the Mayor has referred to it as follows:

"In the month of July of last year, an appropriation of \$2,500 having been made for the purpose by the City Council upon my recommendation, the city initiated the unique experience of opening a camp for boys who would not otherwise be able to secure a vacation outside of the city limits. A committee of four persons was given the general supervision and charge of the camp, and its executive direction was put in the hands of Mr. E. C. Marshall, Penal Institutions Commissioner. The cost for the equipment of the camp, to accommodate 100 boys, was a little under \$1,000, and other expenses amounted to about \$1,500. The camp remained open for seven weeks, and 831 boys were received in all, so that the weekly *per capita* cost of maintenance was \$1.83. The boys received were between the ages of ten and sixteen years, and upon the whole the results achieved were quite satisfactory and afford distinct encouragement for the consider-

able extension of this plan next summer. I believe that this is a profitable line of educational and social work, and that training of some value can be given even during the short period of one week, besides affording to the boys most needing it an opportunity for a change of scene and for out-of-door life, with boating and bathing, which has so much recreative value and quickening influence. I have already expressed my belief that an expenditure of \$10,000 to give 5,000 boys a week's outing each of this character would be fully warranted in the value of the results from an educational standpoint alone, if we take a broad view of what education consists of and do not make the mistake of confining it to what can be learned from books in the school-room."

Fire Protection. — The buildings on Long Island and at Charlestown are still without adequate fire protection, but arrangements are under way for providing a salt-water service for the Long Island Almshouse and Hospital. An appropriation of \$11,000 for this purpose was granted during the year, and a system of protection would have been established immediately had it not been deemed best to defer operations for a little in the hope that arrangements for a new power-house might make such steps easier and more secure. It is the hope of the Trustees that during the coming year both institutions may be adequately protected.

Boat-Service for Long Island. — Owing to the fact that all communication between Long Island and the main land is by water, the Trustees have come to the conclusion that in the near future one boat at least should be provided for their exclusive use. At present the boat service consists of the steamers "J. Putnam Bradlee" and "John Howard," both in charge of the Penal Institutions Commissioner, Mr. Marshall. The Pauper Institutions Trustees are much indebted to Mr. Marshall for many courtesies, but they believe that while continuing the service of the "Bradlee" it would undoubtedly be for the best interests of the Long Island Institutions, and especially of the hospital, if the "John Howard" or some similar boat should be put at their exclusive disposal. (See page 46.)

Finances. — Detailed statements of the financial income and outgo of the year will be found in tabular form beyond. It is the constant aim of the Trustees to reduce as far as possible the number of inmates, in the belief that it is their duty to diminish as far as possible the mass of pauperism pertaining to the body politic. To this end, generally speaking, they discourage by every means in their power, resort to and continuance in the almshouses of the city.

In particular, during the year passed and since the total abandonment of prison labor on Long Island, more and more labor has been expected and required of inmates. This policy has had the tendency to diminish in the working season the total number of inmates, a result which the Trustees regard as wholly satisfactory. It cannot be denied, however, that one result has been and is likely to be a somewhat increased *per capita* expense. This is in part due for the present year to the hospitality extended to United States soldiers, the extra cost of whose care was a considerable sum, but who are not included in the regular population of inmates. It is also due in part to the higher prices of most supplies during the Spanish War period of 1898. Extensive repairs have also been found necessary during the year, especially at Charlestown, and these also are included in the *per capita* expense.

Changes in the Staff of Officers on Long Island. — Mr. A. H. Hopkins, Deputy Superintendent, resigned his office on February 28, to take effect on March 15, 1898, and Mr. A. T. Hopkins, as special assistant, filled his place during the months of March and April. Mr. Thomas J. Condon became Deputy Superintendent on May first, a position which he still holds. On October 15, the office of Clerk of the Boston Almshouse and Hospital was abolished in order to effect certain changes in the work, and this change necessitated the retirement of Mr. J. J. Monroe, Clerk. On November 21, it was voted to establish the office of Book-keeper, Stenographer and Typewriter, and somewhat later Miss Annie M. Peaslee was appointed to fill this position. On October 17, Dr. Lowell F. Wentworth resigned his office of Superintendent of the Boston Almshouse and Hospital, which he had held for about two and one-half years, and his resignation was accepted by the Board, to take effect on January 15. The Trustees are glad to put on record their appreciation of Dr. Wentworth's interest in, and devotion to, the work, and his humane treatment of the inmates. At the expiration of Dr. Wentworth's term of office the Deputy Superintendent, Mr. Condon, became Acting Superintendent.

Executive Agent. — The Trustees, at the cost of much time and labor, having carried on the work of the department with the aid of the superintendents only, for nearly a year and a half, determined that it would be expedient to secure the assistance of an Executive Agent. Accordingly, in October, Mr. Parker B. Field was appointed to this office, and entered on its duties on November 1.

Mr. Field brought to the work an experience of twelve years in business, and a training in philanthropic and charitable work which included one year in connection with the Boston Children's Aid Society, two years as Superintendent of the Barnard Memorial, and the same time as Principal of one of the public evening schools of the city, besides practical familiarity with the methods of the Associated Charities, the Boston Provident Association and the Industrial Aid Society.

Respectfully submitted,

WILLIAM T. SEDGWICK,
ALICE N. LINCOLN,
WILLIAM H. GRAINGER, M.D.,
WILLIAM L. RUTAN,
SARAH E. FALLON,
FRANCES R. MORSE,
WALTER HUNNEWELL.

REPORT OF THE SUPERINTENDENT OF LONG ISLAND.

LONG ISLAND, BOSTON HARBOR, January 15, 1899.

To the Pauper Institutions Trustees :

Complying with the courteous invitation of your Board, I respectfully submit the report of this institution due February 1 of this year.

The year that has passed covers an eventful epoch in the history of the institution. Early in the year there came the declaration of war between this country and Spain, causing active operation on the part of the United States Government in completing the fortification at Long Island Head and bringing a large force of men to the island. On account of the situation of our buildings, the exposure to danger from an invading force would have been very great, and preparations were made for speedy removal of the inmates should immediate danger arise. No actual removals were made except to return to the towns of their proper residence such inmates as were boarding here. Occasion was also taken to commit to lunatic hospitals such inmates as were mentally deranged.

Numerous changes in the official force have occurred. Mr. A. H. Hopkins retired from the deputy superintendency in March, and, after an interim of a couple of months, during which Mr. Arthur T. Hopkins acted in the capacity of Deputy, the place was filled by the appointment of Mr. Thomas J. Condon. By action of your Board the office of Clerk was abolished November 15, and the vacancy made by the removal of Mr. J. J. Monroe, which was thereby effected, was filled by the appointment of Miss Annie M. Peaslee as book-keeper and stenographer. About the usual number of changes in the rank and file of officers and employees, other than those mentioned, have occurred from unavoidable causes. To secure greater permanency in the official positions, larger salaries must be paid and more frequent boat service established to bring the officers into contact with the social life which to a larger degree seems to be quite indispensable.

IMPROVEMENTS IN BUILDINGS AND EQUIPMENT.

There has been in all departments of the institution a general activity and constant effort to improve existing conditions, which I believe has not been without its good result, and I have no hesitation in inviting an inspection of the institution in comparison with conditions which existed a year ago. We have not been at a standstill, and I believe the measure of improvement has been sufficient to satisfy any reasonable demand.

In the main building of the institution radical changes have been made. The old partitions and refrigerator have been removed from the basement beneath the culinary department and the whole space has been devoted to the use of the engineer. The sanitary conditions which had existed at this point were extremely unsatisfactory and the change which has been made has added greatly to the healthfulness of the institution.

The room beneath the inmates' dining-room, which was formerly used as a smokers' hall, has been thoroughly renovated and a model store-room fitted up therein. A meat room has been partitioned off and an ample modern refrigerator has been put in place. This change brings the stores of the institution into convenient compactness, where the work of receiving and distributing can be efficiently supervised by the storekeeper, and the cutting of a doorway through into the areaway between the stairs gives convenient access to this department from the office. The partitions have been removed from the site of the old store and the whole space having been thrown together is used as a smoking-room. This arrangement we found much more convenient than the former one, and, being in proximity to the toilets, would seem to be the more rational assignment of this room.

A very comfortable library and reading-room has been fitted up in the room over the inmates' dining-room formerly used as a chapel and school-room. Oak tables and comfortable chairs have been provided and, within specified hours, the men are privileged to use this room, and, I believe, with universal satisfaction. Further furnishings can be supplied to advantage, and I hope this suggestion will receive your considerate attention.

Immediately in the rear of the room last mentioned four comfortable rooms for officers have been partitioned off and furnished.

The laundry has had its capacity for doing work increased

by the addition of a new metallic washer, and an eighty-inch mangle was also recently added.

During the year all of the external woodwork of the men's building was repainted and the window sashes newly puttied. There has also been a general repainting of the interior of this building.

At the women's dormitory the interior has been thoroughly renovated and repainted and is now in a very cleanly and excellent condition, but we have felt here the effects of stormy and severe weather, as in former seasons, and extensive repairs will frequently be necessary on the exterior of this structure. During the severe storm of November 27, 1898, considerable damage was done to the ventilating stacks, necessitating extensive repairs. The embankment in the rear of this building will continue to require serious attention, as in the storm previously referred to from two to three feet of the already narrow embankment was washed away.

Important improvements have been made in the hospital. The diet kitchens in the wings at both extremes have been enlarged by the removal of the partitions which formerly subdivided the space into dark passageways, and light, airy, spacious rooms have been thus secured. A new storeroom with an ample refrigerator has also been provided in connection with the hospital kitchen. In the wards, the partitions in the middle and centre wings, and a portion of those in the lower wing have been removed, greatly increasing the cheerfulness of the wards, and improving the distribution of light and air. The wards have also received a general renewal of paint. One hundred and thirty-four new iron hospital beds have been supplied and the nursery has been equipped with modern iron cribs. Further extensions of direct steam heating of the hospital wards have been made, and all of the middle and lower wings, as well as the centre building can now be made comfortable in the most extreme weather. In last year's report your attention was called to our need of a better morgue. As no money was obtainable for this purpose, an effort was made to improve the existing morgue, and the preserving chamber was protected from the heat of the sun by a wooden jacket, thus securing an additional dead air space, which has proven to be a satisfactory insulator. The ice box was also remodeled and enlarged, and so far as preservation of bodies went, we had nothing of which to complain during the summer. Under its proper heading I shall make a further recommendation regarding the morgue.

Very important changes have been made in the Farm Department. At the barn there have been extensive improve-

ments: a new grain room and a tool room have been built; new stalls have been provided for twenty head of cattle, and the cow tie-ups have been further improved by cutting in new windows along the east side. The new stalls which are ranged along the easterly side of the barn have been made with impervious floors and iron gutters to secure proper disposal of drainage, and new swinging stanchions have been used. Thorough whitewashing has been kept up, and the whole scheme of changes has been in line with the suggestion recently made by the Cattle Commissioners. The portion of the barn used for horses has been equipped with three new stalls and the old stalls have been rebuilt. The rearrangement in this portion increases the light and ventilation, and the sanitary conditions about this department are very satisfactory. I am glad to be able to state that the site of the old piggery has been abandoned, and by a partial removal of the old buildings and the construction of other new portions we have secured a piggery which accommodates one hundred and seventy-five hogs, with a slaughter and cooking-house attached. While not architecturally pretentious, this building is thoroughly sanitary and good so far as it goes. The floors throughout are of Portland cement, and the paved yards permit the stock to live in a cleanly state. A great amount of labor has heretofore been necessarily expended in supplying our swine with water, but the new structure has a water supply from a four-inch extension made from the water main, which will also furnish water for flooding the new ice pond on which work has been commenced.

New rooms have been provided for the farmer in the lower story of the larger cottage, thus removing him and his family from the institution proper and giving him much more comfortable and satisfactory quarters.

The grounds have been improved by setting out some four hundred trees, and it is to be hoped that tree planting will be encouraged and industriously followed in succeeding seasons. It is greatly to be regretted that we should have lost eight large trees during the storms of the past year. Several of these were noble specimens, more than three feet in diameter.

HOSPITAL.

The work of the hospital during the year has been very largely increased by reason of the war. With the coming of troops to the Post at Long Island Head in March, a request was made by the commanding officer for such medical aid for his men as might be required, and, although the garrison was

later increased to two hundred men, the medical service was supplied by our hospital staff either by visits of the men to the hospital out-patients' department or by the visit each morning of a medical officer to the Post.

In response to the call that was made for the accommodation of sick soldiers in the public hospitals of the city, the wards of our hospital were thrown open to returned sick soldiers, and on the 13th of September we received sixty-one men from the hospital ship "Relief." These men were landed at the wharf in Boston and were transferred to the Institution by the steamer "J. Putnam Bradlee." The middle wing of the hospital had been vacated and put in readiness for their reception, and from that time until December 1st this section of the hospital was set apart for the care of sick soldiers. Additional nursing force was provided, and all of the working force was increased with a view to securing adequate care. I wish especially to acknowledge the service of Dr. James J. Minot of the visiting medical staff for his untiring devotion to these men, and we note with pride and great satisfaction that of the men previously mentioned with the additional cases sent us by the Massachusetts Volunteer Aid Association, making a total of ninety-eight soldiers treated altogether, not a single case was lost but excellent recoveries in all were secured. These men were generally very sick on reaching the hospital. The most conservative treatment was instituted at once, and no men were allowed to leave their beds until correct diagnoses had been made and safety assured. Although we thus had brought to us some thirteen cases of typhoid fever, the disease was not communicated to any of our ordinary population.

The training school has continued to do good work, and through its influence the nursing in the hospital has been decidedly improved. The number of pupil nurses has been increased to thirty.

There have been several changes in the personnel of the resident medical force. Dr. C. M. Hutchinson resigned and entered private practice in March, and Dr. A. A. Taft was promoted to succeed him. Dr. Howard Gallagher, who had finished his term as senior house-officer, was appointed to the vacancy made by Dr. Taft's promotion. Dr. David J. Johnson, upon the termination of his term as house-officer, received an appointment to the military post at Fort Warren. The positions of senior and junior house-officers are now respectively filled by Drs. B. F. Worthing and J. E. Ingoldsby.

The hospital has done good work, and conspicuous in the

expansion of the work should be mentioned the increase in pathological research. The visits of the medical staff have been regularly made throughout the year, and their valuable services are again most cordially acknowledged.

INMATES.

An analysis of the statistical tables will indicate a marked change in the character of the population of the past year. I am able to say that the number of able-bodied young men resident here has been smaller than during the period covered by the last report. This result is partially due to the closer restriction placed upon admissions at the registration office, and has also been largely contributed to by the policy within the institution of exacting labor from able-bodied inmates. It has not always been easy to pursue this policy. The average able-bodied, chronic pauper is as averse to work as it is possible for a human being to be, and it has required the exercise of persistency to counteract his inertia. It has occasionally been necessary to resort to solitary confinement for inmates who refused to perform the tasks assigned them, but the full extent of the law has not been necessary in any case. The following notice has been posted throughout the institution, and it has not been without its effect:

The attention of inmates is called to the following extract from the Laws and Resolves of the Legislature of Massachusetts:

ACTS OF 1895. (CHAP. 445.)

AN ACT RELATIVE TO PERSONS RECEIVING PUBLIC AID.

Be it enacted, etc., as follows:

SECTION 2. Every person receiving aid in an almshouse or workhouse of a city or town may be required by the officer in charge thereof to perform such labor as the official physician shall certify to be suited to the age, strength and capacity of such person.

SECT. 3. Whoever refuses or neglects to perform any labor required of him as aforesaid, or while performing such labor willfully damages any property of the city or town requiring the performance of such labor, shall, on conviction thereof by any court or magistrate having jurisdiction of the offence, be punished by imprisonment not exceeding one year in the House of Correction or at the State Farm; or, in the County of Suffolk, in the House of Correction or House of Industry.

The above provision of law will be enforced in this Institution.

(Signed)

L. F. WENTWORTH, M.D.,

Superintendent.

The transfer of the men formerly at the Charlestown Almshouse to this institution has increased our number of men by about twenty-five. The female population is much more stable than the male, and there are but few young women admitted except such as may require hospital treatment. It has been my policy to restrict the leaves-of-absence of inmates to much smaller proportions than has been previously the custom, and unless there has been some good reason for giving passes to able-bodied inmates, the use of them has been restricted to the invalids and aged. This practice has also been of assistance in keeping young men out of the institution, but it has increased our showing of admissions and discharges, for the rule governing discharges has been more frequently taken advantage of, and inmates have gone out on discharges who have been unable to obtain the pass which they desired. In many instances these individuals have been readmitted within a day or two after leaving the institution. There would be a decided advantage in applying special restrictions to this class of applicants for permits to re-enter the almshouse.

The following recommendations are made:

1. The hospital wing with its equipment, recommended in last year's report is again urged upon your attention.

2. We are still in need of the wards for contagious diseases, and I hope an appropriation for the same will be available this year.

3. New sanitary furnishings in the hospital are still needed, and in the men's wing the toilets and bath-rooms need a thorough renovating and a new supply of fixtures.

I wish to call your attention to the desirability of supplying shower baths in this portion of the hospital. There are but three tubs for bathing eighty-five men. For the purpose of saving time and economizing in heat and water, I recommend the establishment of several shower baths in this wing. I also recommend the removal of the tubs in the inmates' bath-room at the men's institution, and the substitution therefor of a shower-bath system.

4. Again calling your attention to the morgue, I recommend the building of a frame addition, 12 feet by 18 feet, to be lighted principally from above, and equipped with such fittings as may be necessary to make it convenient for the work of the pathologists. This addition can be made at small expense, and with the present capacity of the morgue for the preservation of bodies, the needs of the institution in this respect will be provided for for years to come.

5. Further improvements in the hospital kitchen are very much needed. I should advise the removal of the partition between the kitchen and the room on the westerly side, with the remodeling of the stairs and the introduction of a freight elevator. Additional steam cooking apparatus should be provided for all the kitchens.

6. Your attention is again called to the great need of a new laundry building. This, at present a very weak point in the institution, is the key to an important situation. If a new laundry building were provided, the present laundry site could be used in connection with the kitchen, and would also give room for a bakery. For two years the baking of this institution, sometimes having a population of nearly one thousand, has been done in an oven measuring 6 feet by 7 feet. It is impossible to drive at this gait perpetually, and immediate steps ought to be taken to relieve the two important departments referred to. The welfare of the institution is largely dependent upon the bakery and laundry, and this matter is worthy your serious and early attention.

7. The ventilation of the men's building has been so many times advocated that it seems almost useless to refer to it again, but the plans which have been made for this improvement ought to be carried into execution at the earliest possible day.

8. The steam heating and electrical plants are inadequate for the institution. During the past year, plans have been partially made for the relocation and rebuilding of the power plant, and it is earnestly desired that the needs of the institution in this respect may be provided for at an early day. In connection with the relocation, there should be workshops for the engineer and carpenter, with an equipment of machinery, so that needed repairs may be promptly made. Much valuable time is now consumed in securing simple repairs from the city.

The usual statistical tables are appended for your consideration.

Religious services have been held each Sunday during the year, and early in the autumn a change in the service was made whereby both Protestants and Catholics were given an opportunity to worship each Sunday instead of alternating as they have heretofore done. The chaplains, Rev. W. B. Toulmin and Rev. P. H. Brennan, have been constant in their attendance on such as wished their services.

I wish to extend my thanks to the heads of departments and the employees of the institution in general for their

careful attention to duty, and the faithfulness of their support. I am also under many obligations to the captains of the boats in the institution's service for many courtesies.

Having finished my work in connection with your department I will take my departure, assuring you of my continued interest in the welfare of the institution which I have endeavored to serve.

Respectfully submitted,

LOWELL F. WENTWORTH,
Superintendent.

REPORT OF THE VISITING MEDICAL STAFF OF THE LONG ISLAND HOSPITAL.

To the Pauper Institutions Trustees:

During the past year improvement in the general condition of the hospital has been uninterrupted. We feel that this is due to the interest shown in its development by the late Superintendent of the institution, the resident physicians, and by the highly conscientious work of the Superintendent of Nurses and her staff. The wards are now clean and orderly, equal to those in our best city hospitals. The attitude of the patients is respectful to authority, and the air of discipline increases in proportion to the care bestowed upon them.

No one thing has conduced more to orderliness than the commitment to proper hospitals of noisy and troublesome insane patients. The policy has been to transfer those persons who, through their disordered mental state, have interfered with the welfare of non-insane patients, thereby relieving the hospital of patients for whom it is not intended and also assisting toward a proper classification of the dependent poor.

A distinct advance in treatment has been made in the introduction of adequate methods of infant feeding. Through this means the deaths due to digestive disturbances have been reduced to one-quarter of what they were. A well-equipped and sunny nursery has been established, which will also do its share in diminishing infant mortality.

During the past summer the Board of Trustees opened the middle wing of the hospital for soldiers returning from Cuba. This was made possible by the transfer of the patients there to other wards and when possible to the dormitories. One hundred and twelve soldiers, including out-patients from fortifications on Long Island Head, were treated, with no deaths. During the period of the soldiers' residence on the island a daily boat service was instituted, in so far temporarily converting the hospital to the basis of one on the main land. The visiting staff wishes to express its appreciation of the willingness with which the house staff

and nurses accepted the extra work imposed upon them, and also of the valuable services of Mr. F. R. Jouett, medical student, who served as volunteer house officer during the stay of the soldiers.

We would respectfully call attention again to certain recommendations made to you in the last report. These were: The relief from overcrowding of the male wards; the separation of tuberculous patients from others, and the desirability of an increase in the number of small rooms; the necessity of proper facilities for the care of cases of contagious disease; the better arrangement of the out-patient department; the enlargement of the morgue. We desire to lay special stress upon the last recommendation. The present building is altogether inadequate, and we are convinced that no improvement would conduce so much to the development of the hospital department as a more commodious and properly equipped structure.

We would finally urge the desirability of an improved boat service. Could the service be a daily one, or could the boat be subject to call at other times than as at present arranged, twice weekly, we are confident that the medical efficiency of the hospital could be very materially increased.

During the past year Dr. E. A. Crockett, visiting aurist, has resigned from the staff, through stress of other professional work. Dr. E. M. Plummer has been appointed to fill his place. Dr. George B. Magrath has been appointed visiting assistant pathologist to the hospital.

In conclusion, we beg leave to state that in our opinion one of the most pressing medical needs of the city is a properly appointed hospital to which those suffering from incurable disease may be sent. This need the Long Island Hospital should supply more completely than is at present the case. To this end we hope that in time persons may be admitted to the hospital for temporary or permanent treatment, without the stigma which attaches to the name of pauper. Could this be accomplished, we feel sure that the range of usefulness of the hospital would be materially extended.

Respectfully submitted,

ABNER POST, *President,*

JAMES J. MINOT,

E. W. TAYLOR, *Secretary,*

For the Visiting Medical Staff.

REPORT OF THE SUPERINTENDENT OF NURSES OF THE TRAINING SCHOOL OF THE LONG ISLAND HOSPITAL.

To the Pauper Institutions Trustees :

At present there are in the Training School thirty-one pupil nurses, two assistants, and two head nurses. We have six pupil nurses taking the place of head nurses in the wards, and in that way saving the expense of graduate nurses. The pupil nurses are very superior to the nurses of the old school. They are a brighter and better educated class of women, most of them having a high school education or its equivalent.

There are now three classes in the school. The senior class is in charge of the Superintendent of Nurses; the middle class in charge of her assistant; and the junior class in the charge of the Superintendent of Night Nurses. All the written work is under my supervision. Each class has a lesson every week and a lecture given by one of the staff physicians. What we call "bedside" lectures, are also given to the different classes of nurses. The nurses attend the operations in turn, and each nurse has a month in the operating room. We have also lessons in cooking and massage.

The nurses now take full charge of the wards, both the household part and the care of the patients. The beds are clean; the patients are clean, which is accomplished only by eternal vigilance, as it is very hard to keep out-patients clean, both on account of their old age, and, also, because of the loathsome diseases from which many of them suffer. The patients in Wards L and B require constant care, it being almost impossible to keep them clean. The work and care of the nurses in these wards for their patients would seem almost incredible, if one did not see it every day. Yet, notwithstanding the odds against us, we take satisfaction in saying that there is not one bed-sore in the entire hospital. The rules for bathing patients are most rigid, and to that is due largely the comfort and well-being of the old people.

My constant care has been to place the Training School on a basis as nearly equal as is possible under our conditions to that of the training schools in the city proper, and to have our hospital take rank with the fully equipped hospitals in the city. This has been a hard struggle, but the improvement in the appearance of the hospital, in the nurses, and, most important of all, in the poor old people more than compensates for the great effort.

Respectfully submitted,

MARY A. MORRIS,

Superintendent of Nurses.

RULES FOR ADMISSION TO THE HOSPITAL AT LONG ISLAND.

Persons eligible to care in the hospital at Long Island, Boston Harbor are:

1. Any person who has a legal settlement in the city of Boston and stands in need of relief and is ill.
2. Any such person who, if well, could be supported at his home, but who, being ill, needs special medical or surgical care which he cannot afford to provide.
3. Persons standing in need of relief, having no settlement in Boston, but who are too ill to be removed to the city or town of their settlement, or to a State institution if they are without a settlement.

The question of settlement will be determined by the Institutions Registration Department, 28 Court square; office hours, 9 to 5 o'clock; on Saturdays, 9 to 2 o'clock. Any person able to walk should apply at that office. An ambulance and carriage are at the disposal of that office, and would be sent for persons unable to walk, to carry them to boat or train.

Cases of contagious illness, such as scarlet fever, diphtheria, etc., are not received at Long Island, but should be referred to the City Hospital.

In the case of a person who does not speak English, it is desirable that he should be accompanied by a friend who could interpret when he makes his application at 28 Court square.

 It is very desirable that application should be made the day before it is desired that the person should go to the hospital, or, if an emergency case, before 12 o'clock, to admit of the settlement being looked up and the ambulance or carriage sent, if necessary. If a person applies at this office too late for admission on the same day, he would be sent from this office to the Wayfarers' Lodge (men), or to the City Temporary Home (women).

 It is earnestly requested that if a person is advised to apply for admission to the hospital at Long Island, he should be made to clearly understand that it is the Hospital Department of the Boston Almshouse, as much distress has often been occasioned by ignorance of this fact at the time of going to the hospital.

The executive force of the Hospital at Long Island consists of the First Medical Officer, with three assistants, who have immediate charge under the direction of the Visiting Medical Staff. There is a training-school for nurses, with a superintendent of nurses and two assistants, four head nurses, and thirty probationers or pupil nurses.

REPORT OF THE SUPERINTENDENT OF THE
BOSTON ALMSHOUSE IN CHARLESTOWN
FOR WOMEN AND AGED COUPLES.

CHARLESTOWN DISTRICT, April 4, 1899.

To the Pauper Institutions Trustees :

The annual report of this institution for the year ending January 31, 1899, is herewith respectfully submitted.

The change made by your Board in July last, in accordance with your plan of making the institution a home for women and aged couples, seems to be abundantly justified by the results. Each improvement you have suggested has worked satisfactorily, and the inmates seem to enjoy in harmony the new *régimé*.

As heretofore, religious services have regularly been held, open to all who desire to attend. Rev. George Maxwell of Charlestown has greatly endeared himself to the inmates by his ministrations, and the choir boys of his church, with their fine voices, have added much to the interest of the services. I also take pleasure in testifying to the kind interest shown in the welfare of the inmates by the clergy of St. Francis de Sales Church. Mass is occasionally said at the almshouse for those unable to attend the services at the church on Bunker Hill street.

On several of the holidays of the past year entertainments were given, which most pleasantly broke the monotony of life among the inmates. The sun-room on each occasion was decorated with flowers, evergreens or flags; music was furnished by artists, who seemed to enjoy the enthusiasm with which their efforts were received. Among those who have offered their services for these occasions are Miss Harriett Shaw, the eminent harpist; the Gabrielson children of Roxbury, Mr. James O'Brien, Mr. Goodwin, the Cecilia Orchestra and others.

The health standard has been high, and has been so kept by the skilful advice and care of our physician, Dr. Sprague, and the untiring efforts of the several matrons.

Much has been done in perfecting the steam and hot-water apparatus, including valuable improvements in the laundry; also in laying new floors and in painting; the cleaning and sweetening of every room from the basement to the attic has been in progress for several months, largely by the help of the inmates, and little additional in this line now needs to be done.

The garden in front of the house has supplied the table of the officers and inmates with fresh vegetables during the summer, and for the winter from the same source have been obtained most of the squashes, beets and onions needed.

I would respectfully request that during the ensuing year the very much needed renovation of the plumbing throughout the institution may be accomplished, also that suitable lavatories for both men and women should be provided.

I wish to extend to the Board an expression of my appreciation of their support and kind co-operation during the time I have been in charge of the almshouse.

Very respectfully,

SARAH GREENLEAF WEEDEN.

REPORT OF THE VISITING PHYSICIAN OF THE
BOSTON ALMSHOUSE IN CHARLESTOWN,
FOR WOMEN AND AGED COUPLES.

To the Pauper Institutions Trustees :

I have the honor to submit the following report as visiting physician of this institution for the year ending January 31, 1899:

During the past year, particularly the fall and winter months, the health of the inmates has been unprecedentedly good, and at times weeks have elapsed with scarcely a patient sick enough to be confined to bed.

This perfect immunity from acute ailments, is, in my opinion, due to the zeal of the superintendent and her intelligent enforcement of the laws of hygiene regarding diet, cleanliness, ventilation and the heating of the building. The usual chronic cases incidental to advanced age principally called for treatment.

With the advent of a paid matron to care for the sick, a long-felt want has been supplied, much to the solace and comfort of those needing such service.

There were five deaths during the year; of these three were females and two males, from the following causes: senility, three; valvular heart disease, one; paralysis, one; total, five. Average age of decedents, seventy-four.

In conclusion, I desire to express my thanks to Miss Weeden for her unfailing courtesy in all our official relations, and also to the matrons and under help for their thoughtfulness and consideration in all the little details connected with my daily visits.

Very respectfully,

R. W. SPRAGUE, M.D.

TABULAR FINANCIAL STATEMENTS.

EXPENDITURES FOR ALMSHOUSE AND HOSPITAL, LONG ISLAND,
1898-99.

Salaries :

Dr. L. F. Wentworth, Superintendent, December 15, 1897, to December 15, 1898	\$2,500 00	
Employees, December 15, 1897, to De- cember 15, 1898	20,674 71	
		\$23,174 71
Subsistence supplies for officers and inmates	33,246 82	
Clothing and bedding	7,386 94	
Fuel	6,601 91	
Furniture and household supplies	6,121 92	
Repairs and improvements	5,875 54	
Medical supplies and surgical instru- ments	\$2,989 23	
Liquors	975 78	
Lessons in massage	50 00	
		4,015 01
Agricultural supplies	2,715 66	
Water	2,500 00	
Tobacco and snuff	826 15	
Religious services, instruction and amusement	680 95	
Soap and laundry supplies	662 60	
Printing	545 04	
Stationery	494 06	
Telephone	241 47	
Ice	236 10	
Advertising	219 82	
Examination of accounts	200 00	
Postage	145 00	
Gasolene	109 51	
Disinfectants	81 50	
Library supplies	54 93	
Freight	45 87	
Transportation	45 48	
Illuminating oil	41 14	
Memorial window, from estate of Henry T. Davis, former inmate of hospital	25 00	
Total		\$96,293 13

EXPENDITURES FOR ALMSHOUSE, CHARLESTOWN, 1898-99.

Salaries :

Chandler Eastman, Superintendent, December 15, 1897, to August 1, 1898	\$812 51	
Sarah G. Weeden, Superintendent, July 15, 1898, to December 15, 1898	375 00	
Employees, December 15, 1897, to De- cember 15, 1898	1,927 01	
		\$3,114 52
Subsistence supplies for officers and inmates		4,940 89
Repairs and improvements		1,911 60
Agricultural supplies		703 28
Fuel		628 94
Clothing and bedding		458 76
Water		395 20
Furniture and household supplies		373 72
Ice		276 65
Gas		247 24
Medical and surgical supplies	\$106 61	
Liquors	58 50	
		165 11
Tobacco and snuff		141 26
Telephone		135 35
Soap and laundry supplies		132 17
Stationery		77 96
Advertising		63 03
Religious services, instruction and amusement		60 20
Printing		38 16
Illuminating oil		22 79
Postage		18 30
Transportation		8 74
Library supplies		5 00
Disinfectants		4 50
Express		3 10
Burials		1 18
Total		\$13,927 65

EXPENDITURES FOR "OFFICE EXPENSE," 1898-99.

Salaries	\$1,143 22
Furniture and office fittings	562 73
Stationery	168 30
Printing	122 39
Telephone	110 53
Postage	56 80
Express	4 55
Transportation	93
Total	\$2,169 45

EXPENDITURES FOR "PAUPER EXPENSE," 1898-99.

Support outside city institutions	\$433 06
Salaries	100 00
Total	<u>\$533 06</u>

RECAPITULATION OF EXPENDITURES.

Almshouse and Hospital, Long Island	\$96,293 13
Almshouse, Charlestown	13,927 65
Office expense	2,169 45
Pauper expense	533 06
Total	<u>\$112,923 29</u>

ACCOUNTS DEPOSITED WITH CITY COLLECTOR ON ACCOUNT OF
INCOME OF THE INSTITUTIONS FOR THE YEAR ENDING JAN-
UARY 31, 1899.*Almshouse and Hospital, Long Island.*

Board of patients	\$4,414 27
Old material	211 76
From estate of Henry T. Davis	25 00
	<u>\$4,651 03</u>

Almshouse, Charlestown.

Board of patients	472 86
Total	<u>\$5,123 89</u>

COMPARISON OF ACCOUNT DEPOSITED WITH CITY COLLECTOR ON
ACCOUNT OF INCOME FOR THE YEARS ENDING JANUARY 31,
1898 AND 1899.

	January 31, 1898.	January 31, 1899.	Increase.	Decrease.
Almshouse and Hospital, Long Island	\$2,735 23	\$4,651 03	\$1,915 80	
Almshouse, Charlestown	282 08	472 86	190 78	
Totals.....	\$3,017 31	\$5,123 89	\$2,106 58	

COMPARISON OF EXPENDITURES OF THE INSTITUTIONS FOR THE
YEARS ENDING JANUARY 31, 1898 AND 1899.

(Cost of Support of Persons in Almshouses outside of the City of Boston
not included.)

	Expenditure for 12 months.		Increase.	Decrease.
	Ending Jan. 31, 1898.	Ending Jan. 31, 1899.		
Almshouse and Hospital, Long Island	\$84,097 74	\$96,293 13	\$12,195 39	
Almshouse, Charlestown..	14,165 06	13,927 65	.....	\$237 41
Totals	\$98,262 80	\$110,220 78	\$11,957 98	

COMPARISON OF ACTUAL COST OF INSTITUTIONS FOR THE YEARS
ENDING JANUARY 31, 1898 AND 1899.

	1898.	1899.				
	Actual Cost.	Expended.	Actual Income.	Actual Cost.	Increase.	De- crease.
Almshouse and Hospi- tal, Long Island.....	\$82,055 91	\$96,293 13	\$2,255 88	\$94,037 25	\$11,981 34	
Almshouse, Chs'n.....	14,140 99	13,927 65	.....	13,927 65	.....	\$213 34
Totals	\$96,196 90	\$110,220 78	\$2,255 88	\$107,964 90	\$11,768 00	

Expended for support of twenty-eight persons in almshouses outside the City of Boston, \$533.06.

THE AVERAGE EXPENDITURE FOR AND ACTUAL COST OF EACH
INMATE OF THE INSTITUTIONS FOR THE YEAR ENDING JAN-
UARY 31, 1899.

	EXPENDITURE.		ACTUAL COST.	
	Per Year.	Per Week.	Per Year.	Per Week.
Almshouse and Hospital, Long Island	\$136 24	\$2 62	\$133 12	\$2 56
Almshouse, Charlestown.....	130 16	2 50	130 16	2 50

EXPENDITURES OF SPECIAL APPROPRIATIONS,
1898-99.

BUILDINGS, ETC., LONG ISLAND.

(On Account of Randidge Trust.)

1898.		1898.	
Nov. 15.	Curtis & Pope Lumber Co., \$394 32	Appropriation.....	\$2,500 00
"	J. O. Wetherbee..... 161 27		
"	" " "..... 191 69		
"	Boston Water Department, 85 50		
"	" " "..... 30 52		
"	Dana Hardware Co..... 33 04		
"	National Lead Co..... 20 56		
"	House of Correction, Deer Island..... 20 48		
"	Boston Bolt Co..... 19 56		
"	N. E. Felt Roofing Works.. 17 45		
"	Waldo Bros. 17 40		
"	Maynard & Duncan..... 14 10		
"	Burditt & Williams 70		
1899.			
Feb. 1.	Unexpended balance..... 1,493 47		
	\$2,500 00		\$2,500 00

SALT-WATER FIRE SYSTEM, LONG ISLAND.

1899.		1898.	
Jan. 11.	Walworth Manuf'g Co..... \$857 21	Sept. 19.	Appropriation.... \$11,000 00
	Unexpended balance..... 10,142 79		
	\$11,000 00		\$11,000 00

EMPLOYEES AND SALARIES PAID AT THE BOSTON ALMS-
HOUSE AND HOSPITAL, LONG ISLAND, ON
JANUARY 15, 1899.

Name and Rank.	Salary per month.
1. L. F. Wentworth, superintendent	\$208 33
2. T. J. Condon, deputy superintendent, of Institution	83 33
3. A. A. Taft, deputy superintendent, of Hospital	83 33
4. W. H. Gallagher, assistant physician	41 66
5. C. A. Keucher, apothecary	60 00
6. N. A. Lane, relief officer	30 00
7. S. Adams, receiving officer	35 00
8. T. E. Murphy, laundry officer	25 00
9. A. W. Davidson, storekeeper	30 00
10. L. F. Dell, engineer	75 00
11. O. S. Bumpus, assistant engineer	40 00
12. A. J. Cunningham, assistant engineer	35 00
13. W. P. Snow, engineer's helper	30 00
14. E. L. Bryant, farmer	50 00
15. L. H. Pingree, assistant farmer	30 00
16. G. E. Budd, assistant farmer	25 00
17. G. Pike, assistant farmer	25 00
18. W. H. Bond, assistant farmer	25 00
19. J. J. Galvin, watchman	20 00
20. T. Maxwell, watchman	20 00
21. T. H. Killion, painter	40 00
22. F. W. Kendall, carpenter	40 00
23. P. J. Cunningham, baker	55 00
24. W. L. Savoy, cook	50 00
25. G. E. Foss, nurse	30 00
26. J. McGrath, nurse	20 00
27. Mary A. Morris, superintendent of nurses	75 00
28. Blanche Snyder, assistant superintendent of nurses	35 00
29. Annie Moore, night superintendent of nurses	35 00
30. Mabel F. Gragg, matron	35 00
31. W. E. S. Constantine, matron	20 00
32. Nannie E. Sheehan, matron	20 00
33. Elizabeth Chapman, matron	20 00
34. J. B. Bachop, night matron	20 00
35. Mary J. Walsh, head nurse	25 00
36. Catharine Berry, nurse	12 00
37. Alicia Barker, nurse	10 00
38. Margaret L. Corbett, nurse	12 00
39. Margaret J. Crane, nurse	12 00
40. Christine Chisholm, nurse	12 00
41. Margaret J. Chisholm, nurse	12 00
42. Emma M. Curtis, nurse	10 00
43. Matilda Crane, nurse	10 00
44. Winnifred Dillon, nurse	12 00
45. Ellen M. Dwyer, nurse	12 00
46. Mary L. Fenton, nurse	12 00
47. Carrie J. Foss, nurse	10 00
48. Annie R. Gordon, nurse	12 00
49. Gustena Gatchell, nurse	12 00

	Name and Rank.	Salary per month.
50.	Mabel Howard, nurse	\$10 00
51.	Margaret A. Kelley, nurse	12 00
52.	Julia Kelliher, nurse	12 00
53.	Kate B. McAdams, nurse	12 00
54.	Sarah E. McGowan, nurse	12 00
55.	Priscilla McKenzie, nurse	12 00
56.	Annie O'Connor, nurse	12 00
57.	Christine McIntosh, nurse	10 00
58.	Frances McKenzie, nurse	10 00
59.	Lillian Queenan, nurse	12 00
60.	Delia J. Riley, nurse	12 00
61.	Rebecca M. Sullivan, nurse	12 00
62.	Mary A. Sweeney, nurse	10 00
63.	Mary Thompson, nurse	10 00
64.	Mary B. Wells, nurse	12 00
65.	Myretta Wait, nurse	12 00
66.	Elsie Young, nurse	12 00
67.	Mary McIsaac, cook	25 00
68.	Margaret Riley, cook	15 00
69.	Emma Grandstadt, cook	25 00
70.	Annie Budd, laundress	20 00
71.	Elizabeth G. McLaren, housemaid	15 00
72.	Adelaide Donahue, organist	12 50
73.	Clara Baker, organist	12 50

EMPLOYEES AND SALARIES PAID AT THE BOSTON ALMS-
HOUSE IN CHARLESTOWN FOR WOMEN AND AGED
COUPLES, ON JANUARY 15, 1899.

	Name and Rank.	Salary per month.
1.	Sarah G. Weeden, superintendent	\$75 00
2.	Rufus W. Sprague, physician (non-resident)	41 67
3.	Clayton H. Parmelee, farmer	40 00
4.	Theresa L. Parmelee, matron	25 00
5.	Ellen Mahoney, matron	20 00
6.	Miriam G. Church, matron	20 00
7.	Mary J. Furlong, matron	18 00
8.	Nellie O'Keefe, cook	18 00
9.	Thomas White, baker	15 00

POPULATION STATISTICS OF BOSTON ALMSHOUSE AND HOSPITAL, LONG ISLAND.

Daily Population at Boston Almshouse and Hospital, Long Island, from February 1, 1898, to January 31, 1899.

DAY OF MONTH.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.
1.....	846	866	732	679	579	606	642	601	609	680	724	808
2.....	846	866	733	617	583	601	644	609	608	673	729	807
3.....	850	866	733	616	587	601	636	606	610	676	735	813
4.....	852	875	708	601	592	601	636	604	613	677	736	815
5.....	856	876	712	605	592	599	642	604	616	679	737	822
6.....	855	876	715	608	592	602	644	604	616	680	744	832
7.....	855	870	722	609	599	601	644	606	622	682	750	837
8.....	857	871	723	609	596	606	646	605	626	683	753	837
9.....	852	869	725	605	594	605	648	608	626	681	755	832
10.....	856	872	703	609	599	605	651	609	633	682	755	837
11.....	862	875	703	608	605	606	656	609	633	684	755	836
12.....	861	875	702	612	612	613	660	607	632	694	754	834
13.....	858	875	697	614	612	621	660	606	633	693	761	839
14.....	858	854	700	616	613	625	660	609	633	695	765	840
15.....	858	857	699	616	618	627	656	609	636	697	768	840
16.....	861	856	700	617	618	637	659	613	636	700	771	838
17.....	864	858	693	620	614	637	662	614	640	703	781	843
18.....	872	854	691	615	617	632	658	614	643	705	781	842
19.....	874	856	691	619	617	640	660	610	648	710	781	848
20.....	874	856	692	624	618	638	659	609	656	711	787	851
21.....	874	834	692	626	623	642	659	611	650	708	789	858
22.....	873	837	692	626	626	642	657	614	664	711	788	855
23.....	875	830	693	626	632	643	659	618	664	717	791	860
24.....	879	826	693	625	636	643	659	617	662	721	793	861
25.....	883	825	686	628	637	645	653	617	672	722	793	862
26.....	884	829	685	632	637	653	654	596	675	730	793	866
27.....	884	829	685	634	615	654	656	598	676	729	793	869
28.....	865	731	677	632	617	656	656	594	681	726	796	876
29.....	.....	734	682	632	601	657	617	599	683	718	805	861
30.....	.....	734	679	632	607	656	612	602	683	718	806	862
31.....	.....	735	.....	598	.....	656	601	.....	674	.....	808	860
Average..	864	841	701	620	609	623	649	607	644	700	770	839
Maximum,	884	876	733	679	637	657	662	618	683	730	808	876
Minimum.	846	731	677	598	579	599	601	594	608	673	724	807

Maximum for year, 884; minimum for year, 579; average for year, 706.

TABLE SHOWING MOVEMENT OF POPULATION.

	Male.	Female.	Total.
Remaining January 31, 1898	496	357	853
Admissions, including births	663	375	1,038
Whole number supported	<u>1,159</u>	<u>732</u>	<u>1,891</u>
Discharges, including deaths	666	365	1,031
Absent on leave	4	—	4
Whole number of removals	<u>670</u>	<u>365</u>	<u>1,035</u>
Remaining January 31, 1899	<u>488</u>	<u>372</u>	<u>860</u>
Deaths	83	110	193
Births	7	12	19

TABLE SHOWING TOTAL ADMISSIONS, DAILY AVERAGE POPULATION, ETC., FOR PAST TEN YEARS.

YEAR.	Total Admissions.	First Admissions.	Number Remaining at Date of Annual Report.	Daily Average Population.
1889.....	1,273	....	847	816
1890.....	1,154	332	862	746
1891.....	1,273	453	926	813
1892.....	1,352	441	992	812
1893.....	1,705	379	919	728
1894.....	1,951	364	960	806
1895.....	1,501	352	815	693
1896.....	1,310	385	853	706
1897.....	1,020	381	853	689
1898.....	1,038	369	860	706

AGES OF PERSONS ADMITTED.

	Male.	Female.	Total.
Under twenty years	16	20	36
Twenty to thirty years	59	31	90
Thirty to forty "	169	96	265
Forty to fifty "	218	54	272
Fifty to sixty "	91	77	168
Sixty to seventy "	50	67	117
Seventy to eighty "	30	39	69
Eighty to ninety "	9	12	21
Total	<u>642</u>	<u>396</u>	<u>1,038</u>

OCCUPATIONS OF PERSONS ADMITTED.

Men.

Agents	2	Die-maker	1
Artist	1	Engineers	7
Baker	1	Farm hands	3
Barbers	8	Firemen	5
Bartenders	3	Fisherman	1
Blacksmiths	3	Foreman	1
Boiler-makers	8	Furniture finishers	2
Book agents	3	Florist	1
Bookbinders	3	Gardeners	10
Brakemen	2	Glass-workers	2
Brass-moulders	4	Gate-tender	1
Bricklayers	5	Gauge-maker	1
Bill-poster	1	Hack-drivers	6
Boarding-house keeper	1	Harness-makers	2
Bootblack	1	Hatters	3
Book-keeper	1	Hostlers	8
Brass-finisher	1	Iron-moulders	3
Broom-maker	1	Janitors	2
Butchers	5	Laborers	336
Cabinet-makers	3	Lathers	3
Carpenters	16	Laster	1
Cigar-makers	3	Machinists	4
Clerks	7	Marble-worker	1
Cooks	3	Mill-hands	3
Coopers	7	Machine-operators	6
Curriers	7	Merchants	2
Carpet-layers	2	Musicians	2
Constable	1	Moulders	2
Cigar dealer	1	Nurse	1
Clothing-cutters	5	Opticians	2
Confectioners	2	Painters	43
Coachmen	2	Paper-hangers	3
Compositor	1	Pedlers	18

Piano-polishers	4	Shipper	1
Plumbers	11	Steamfitters	2
Pressmen	3	Steel-cutter	1
Printers	15	Showcase-maker	2
Plasterers	3	Shipwright	1
Paver	1	Tailors	12
Physician	1	Teamsters	61
Polisher	4	Telegraph-operators	2
Piano-stringer	1	Tinsmiths	5
Rope-makers	2	Trunk-maker	1
Roofers	5	Turner	1
Rubber-cutter	1	Upholsterers	2
Salesmen	5	Waiters	3
Seamen	9	Whitewashers	6
Machine-operators		Wood-carvers	2
Shoemakers	11	Wood-worker	1
Silver-platers	3	Wood-turner	1
Stonecutters	3	Wheelwright	1
Stone-masons	11	Weavers	4
Sea captain	1	No occupation	3

Women.

Actress	1	Pedlers	3
Cooks	24	Rag-sorters	3
Dressmaker	1	Saleswomen	2
Factory hands	3	Seamstresses	12
Housework	197	Tailoresses	4
Laundresses	6	Waitresses	6
Nurses	5	Wool-sorter	1

ARTICLES MANUFACTURED IN SEWING-ROOM.

Aprons	760	Operating gowns	14
Bags, clothes	58	Overalls	188
Bags, tea	71	Petticoats	302
Bed ticks	85	Pillowslips	1,662
Blankets, babies'	73	Pillowticks	132
Bands, babies'	109	Shawls, shoulder	78
Chemises	481	Sheets	1,526
Coats	12	Shirts	1,595
Dresses	367	Shrouds	279
Drawers	1,285	Suspenders, pairs	646
Hose, pairs	423	Sun bonnets	126
Holders	84	Tablecloths	61
Jumpers	16	Towels	3,061
Mattresses	117	Trowsers	7
Napkins, babies'	336	Waists	354
Napkins, table	96	Window curtains	64
Nightcaps	88	Screen covers	24
Nightgowns	632		

In addition to the above, articles of bedding, clothing, etc., have been repaired to the number of 24,152.

FARM PRODUCTS FOR THE YEAR 1898.

Hay	tons	100
Oats	"	15
Corn fodder	"	125
Beets, mangel-wurzel	"	37½
Squash	"	8
Pumpkins	"	4
Summer squash	"	1
Sweet corn	dozen	3,459
Corn, shelled	bushels	15
Onions	"	523
Beets	"	138
Carrots	"	323
Parsnips	"	375
Radish	"	18
Turnips	"	974
Spinach	"	20
Swiss chard	"	58
Cucumbers	"	65
Tomatoes	"	58
Potatoes	"	227
Peas	"	83
String beans	"	67
Celery	heads	1,500
Cabbage	"	15,000
Lettuce	"	20,000
Parsley	bunches	200
Rhubarb	pounds	800
Beef	"	1,121
Pork	"	16,730
Milk	quarts	87,201
Pigs		128
Calves, 8 months old		6
Yearlings		2
Ice	tons	200

POPULATION STATISTICS OF BOSTON ALMSHOUSE IN CHARLESTOWN FOR WOMEN AND AGED COUPLES.

Daily Population at Almshouse, Charlestown, from February 1, 1898, to January 31, 1899.

DAY OF MONTH.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.
1.....	140	135	128	111	106	102	96	104	93	98	97	99
2.....	140	135	127	111	106	102	96	104	93	98	97	99
3.....	137	135	127	111	106	102	96	104	93	100	97	99
4.....	137	135	127	111	106	102	96	104	93	100	97	99
5.....	137	135	127	111	106	102	96	104	93	100	97	99
6.....	137	135	127	113	106	102	96	104	98	100	97	99
7.....	138	134	126	113	106	102	96	104	98	100	97	97
8.....	138	134	126	112	106	102	96	103	98	100	98	97
9.....	138	134	126	111	103	102	96	103	98	100	98	97
10.....	138	132	126	109	104	102	96	103	98	100	98	97
11.....	138	132	126	109	104	102	96	103	98	100	98	97
12.....	139	130	126	109	104	102	96	103	98	100	98	97
13.....	139	130	126	109	102	102	96	103	98	100	98	97
14.....	139	130	125	109	102	101	96	103	98	100	98	97
15.....	140	130	124	109	102	101	96	98	98	100	98	97
16.....	140	130	124	109	104	101	96	98	98	100	98	97
17.....	138	128	123	109	104	101	96	98	98	98	100	97
18.....	138	127	123	109	104	101	95	98	98	98	100	97
19.....	138	128	123	106	104	101	95	98	98	98	100	97
20.....	138	128	123	106	104	101	95	98	99	98	100	97
21.....	138	128	120	107	104	101	95	98	99	98	100	96
22.....	138	127	120	107	104	101	95	97	99	98	100	96
23.....	138	129	119	107	105	101	95	97	99	98	100	96
24.....	134	127	119	106	104	102	95	97	99	98	100	96
25.....	134	127	119	106	104	102	95	97	99	98	100	96
26.....	134	127	119	106	104	102	95	97	99	98	100	96
27.....	134	127	119	106	104	102	95	97	98	98	100	96
28.....	134	128	111	106	104	96	95	93	98	98	100	96
29.....	.....	128	111	106	104	96	95	93	98	98	100	96
30.....	.....	128	111	106	102	96	95	93	98	98	100	96
31.....	.....	128	.....	106	.....	96	95	.....	98	.....	99	96
Average...	138	130	123	109	104	101	96	100	97	99	99	97
Maximum,	140	135	128	111	106	102	96	104	99	100	100	99
Minimum..	134	127	111	106	102	96	95	93	93	98	97	96

Maximum for year, 140; minimum for year, 93; average for year, 107.

TABLE SHOWING MOVEMENT OF POPULATION.

(Charlestown Almshouse.)

Remaining Jan. 31, 1898 :	
Males	55
Females	85
Total	140
Admitted from Feb. 1, 1898, to Jan. 31, 1899 :	
Males	14
Females	31
Total	45
Discharged from Feb. 1, 1898, to Jan. 31, 1899 :	
Males	43
Females	46
Total	89
Number of deaths from Feb. 1, 1898, to Jan. 31, 1899 :	
Males	2
Females	3
Total	5
Remaining Jan. 31, 1899 :	
Males	26
Females	70
Total	96
Largest number during the year	140
Smallest number during the year	93

Ages of Persons Admitted.

30 to 40 years	1	60 to 70 years	18
40 to 50 years	3	70 to 80 years	7
50 to 60 years	14	80 to 90 years	2

Occupation of Persons Admitted from Feb. 1, 1898, to Jan. 31, 1899.

Cooks	5	Laborers	5
Clerk	1	Mason	1
Carriage painter	1	Seamstress	3
Domestics	8	Teamsters	2
Fisherman	1	Tailoress	1
Glassware packer	1	Upholsterers	2
Housework	5		
Housewives	9	Total	45

NUMBER OF INMATES REMAINING IN THE INSTITUTIONS
JANUARY 31, 1898 AND 1899.

	January 31, 1898.	January 31, 1899.	Increase.	Decrease.
Almshouse and Hospital, Long Island.....	853	860	7	
Almshouse, Charlestown....	140	96	.....	37
Total.....	993	956	.....	30

AVERAGE NUMBER OF INMATES DURING THE YEARS
ENDING JANUARY 31, 1898 AND 1899.

	1898.	1899.	Increase.	Decrease.
Almshouse and Hospital, Long Island.....	689	706	17	.....
Almshouse, Charlestown....	138	107	.....	31
Total.....	827	791	.....	14

LONG ISLAND HOSPITAL STATISTICS.

Movement of Population.

	Males.	Females.	Total.
Remaining in Hospital Jan. 31, 1898 .	90	147	237
Admitted during year	347	416	763
Total number under treatment .	<u>437</u>	<u>563</u>	<u>1,000</u>
Discharged	262	305	567
Died	88	111	199
Remaining Jan. 31, 1899	<u>87</u>	<u>147</u>	<u>234</u>
Largest number in Hospital	.	.	254
Smallest number in Hospital	.	.	157
Daily average	.	.	211
Number of out-patient diagnosis	.	.	1,893

MEDICAL AND SURGICAL STATISTICS.

Classified according to the Nomenclature of Diseases as published by the Royal College of Physicians of London, and American Medical Association.

DISEASES.	In Hospital, Jan. 31, 1899.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
GENERAL DISEASES.										
Morphine habit.....	1	....	....	1	....	1	....	....	....	....
Malaria .....	....	1	1	2	1	....	....	....	....	1
Diphtheria .....	....	....	2	2	1	....	....	....	1	....
" laryngeal.....	....	....	1	1	....	....	....	....	1	....
Debility	3	....	3	6	2	4	....	....	....	....
" senile	23	2	3	28	....	12	4	2	4	6
Arthritis, deformans.....	3	....	2	5	....	....	....	....	....	5
" chronic osteo	1	....	....	1	....	1	....	....	....	....
Lumbago.....	1	3	....	4	3	....	....	....	....	1
Rheumatism, acute	2	3	7	12	11	....	....	....	....	1
" chronic.....	10	4	12	26	....	13	3	....	1	9
Tuberculosis, general .....	....	2	....	2	....	1	....	1	....	....
Typhoid fever .....	....	2	1	3	3	....	....	....	....	....
Anæmia, pernicious.....	1	....	....	1	....	....	....	....	1	....
Alcoholism.....	17	....	11	28	27	....	....	....	1	....
Influenza.....	....	3	4	7	7	....	....	....	....	....
Goitre.....	....	....	1	1	....	....	1	....	....	....
Parotitis .....	....	....	1	1	1	....	....	....	....	....

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Chlorosis.....	.....	.....	1	1	.....	1	.....	.....	.....	.....
Gonorrhœal arthritis.....	.....	3	.....	3	1	1	.....	.....	.....	1
Atelectasis neonatorum ....	.....	1	1	2	.....	.....	.....	1	1	.....
DISEASES OF LUNGS.										
Phthisis, pulmonalis.....	29	95	42	166	1	49	8	32	23	53
Pneumonia.....	.....	8	11	19	11	.....	.....	.....	7	1
“ broncho.....	.....	.....	2	2	.....	.....	.....	.....	2	.....
Bronchitis, acute .....	.....	7	6	13	13	.....	.....	.....	.....	.....
Chronic	4	.....	6	10	.....	3	.....	.....	1	6
Asthma	1	2	3	6	.....	2	1	.....	2	1
Hydro-thorax .....	.....	4	.....	4	.....	4	.....	.....	.....	.....
Œdema of lungs.....	.....	3	2	5	.....	.....	.....	3	2	.....
Pleurisy.....	3	2	10	15	.....	8	3	.....	1	3
Pneumo-thorax .....	.....	.....	1	1	.....	.....	1	.....	.....	.....
Gangrene of lungs.....	.....	1	.....	1	.....	.....	1	.....	.....	.....
Emphysema .....	.....	.....	4	4	.....	1	2	.....	.....	1
Active Congestion of lungs,	.....	.....	1	1	.....	.....	.....	.....	1	.....
Pleurodynia.....	.....	.....	2	2	.....	2	.....	.....	.....	.....
Laryngitis Tubercular.....	1	.....	.....	1	.....	.....	1	.....	.....	.....
CIRCULATORY SYSTEM.										
Mitral regurgitation.....	6	13	24	43	.....	16	4	7	10	6
“ stenosis.....	.....	1	7	8	.....	2	.....	1	3	2
Aortic regurgitation	2	1	4	7	.....	1	3	.....	1	2
“ stenosis.....	2	2	13	17	.....	7	1	3	3	3
Arterio sclerosis.....	2	9	.....	11	.....	3	5	2	.....	1

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Pericarditis.....			1	1			1			
Pleuro-pericarditis.....			1	1						1
Myocarditis.....	5	9	14		6		2	4		2
Ulcerative endocarditis.....	1		1				1			
Aortic aneurism.....	1	2	3			1	1	1		
Patent foramen ovale.....	1		1				1			
INTELLECT.										
Acute mania.....	1		1	1						
Dementia	1	12	26	39			27	2		10
" senile.....	5		4	9			5	2		2
Epileptic insanity.....			2	2		1	1			
Suicidal " 			1	1			1			
Idiot.....	2			2			1			1
Imbecility.....			2	2			1			1
Melancholia			2	2		1	1			
General paralysis	2	5	1	8		2	2	2	1	1
NERVOUS SYSTEM.										
Hemiplegia.....	22	10	12	44		8	3	5	14	14
" syphilitic	1		2	3					1	2
Neuritis peripheral.....		3	5	8	2	3	2			1
" multiple.....	2			2		1				1
" post-typhoid.....	1			1	1					
" syphilitic			1	1						1
Epilepsy	2	5	9	16		13				3
" hystero.....	1		1	2			1			1

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Paralysis, agitans.....	6	....	2	8	....	....	2	....	....	6
Lateral sclerosis.....	2	....	....	2	....	1	1	....	....	....
Multiple ".....	....	....	1	1	....	....	....	....	....	1
Myelitis transverse.....	1	2	2	5	....	1	....	1	....	3
" disseminated.....	....	1	1	2	....	....	....	....	....	2
Tabes dorsalis.....	8	4	1	13	....	2	4	1	....	6
Meningitis.....	....	1	....	1	1	....	....	....	....	....
" syphilitic.....	....	1	....	1	....	....	....	1	....	....
" tubercular.....	....	....	1	1	....	....	....	....	1	....
" lepto.....	....	....	1	1	....	....	....	....	1	....
Ataxic paraplegia.....	2	1	1	4	....	3	....	....	....	1
Bulbar paralysis.....	....	....	1	1	....	....	1	....	....	....
Facial ".....	1	....	....	1	1	....	....	....	....	....
" neuralgia.....	....	....	2	2	....	2	....	....	....	....
Intercostal ".....	....	....	2	2	....	2	....	....	....	....
Progressive muscular atrophy.....	1	....	....	1	....	....	1	....	....	....
Sciatica.....	1	....	3	4	....	1	1	....	....	2
Hydrocephalus.....	....	1	1	2	....	....	1	....	....	1
Senile tremor.....	....	....	1	1	....	....	....	....	....	1
Masturbation.....	1	....	....	1	....	1	....	....	....	....
DISEASES OF PHARYNX, ETC.										
Nasal polypus.....	....	....	1	1	....	....	....	....	....	1
Tonsillitis.....	....	....	6	6	6	....	....	....	....	....
Ulcerative stomatitis.....	....	....	3	3	3	....	....	....	....	....

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Syphilitic pharyngitis.....	.....	.....	2	2	2	.....	.....	.....	.....	.....
Perforated septum.....	.....	.....	1	1	.....	.....	1	.....	.....	.....
Epistaxis.....	.....	.....	1	1	1	.....	.....	.....	.....	.....
DIGESTIVE SYSTEM.										
Gastritis, acute.....	.....	3	18	21	19	.....	.....	1	.....	1
Dyspepsia.....	1	3	.....	4	3	.....	.....	.....	.....	1
Diarrhoea, acute.....	.....	11	8	19	19	.....	.....	.....	.....	.....
“ chronic.....	3	2	.....	5	.....	2	.....	2	.....	1
Enteritis.....	1	9	23	33	24	1	1	5	1	1
Dysentery, acute.....	.....	.....	5	5	2	1	.....	.....	2	.....
Cholera infantum.....	1	.....	.....	1	.....	.....	.....	1	.....	.....
Gastro-enteritis.....	.....	1	2	3	2	.....	.....	1	.....	.....
Ulcer of stomach.....	.....	.....	1	1	1	.....	.....	.....	.....	.....
Cancer of “.....	1	.....	2	3	.....	.....	.....	.....	2	1
Dilated “.....	2	.....	5	7	.....	4	.....	1	.....	2
Enteroptosis.....	.....	.....	1	1	.....	.....	1	.....	.....	.....
LIVER.										
Jaundice, catarrhal.....	.....	.....	4	4	4	.....	.....	.....	.....	.....
Sarcoma of liver.....	.....	1	.....	1	.....	.....	.....	1	.....	.....
EAR DISEASES.										
Otitis media, acute.....	.....	2	1	3	2	.....	.....	.....	.....	1
“ “ chronic.....	.....	1	.....	1	.....	.....	.....	.....	.....	1
Syphilitic disease of labrynth.....	.....	.....	2	2	.....	.....	.....	.....	.....	2
EYE.										
Optic, atrophy.....	.....	2	2	4	.....	.....	1	.....	.....	3

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Gummata.....			1	1	....	1	....			....
Ulcer of cornea.....	1	....	....	1	....	....	1	....		....
Iritis.....	1	....	1	2	1	....	....			1
Cataract.....	3	....	2	5	....	....	4	....		1
Conjunctivitis.....	....	3	2	5	4	1	....			....
Ecchymosis.....	....	....	6	6	6	....	....			....
Chemosis.....	....	....	2	2	2	....	....			....
Carcinoma.....	1	....	1	2	....	....	1	....	1	....
Granular eyelids.....	....	....	2	2	....	2	....			....
SKIN.										
Hypertrophic rosacea.....	1	....	....	1	....	....	1	....		....
Scabies.....	....	2	2	4	3	....	....			1
Dermatitis.....	1	....	....	1	1	....	....			....
Eczema.....	....	2	2	4	4	....	....			....
Herpes zoster.....	....	1	1	2	2	....	....			....
Psoriasis.....	....	1	....	1	1	....	....			....
Melanoderma lenticularis progressiva.....	....	....	1	1	....	....	....			1
URINARY SYSTEM.										
Nephritis.....	7	12	4	23	....	9	4	5	2	3
Cystitis.....	2	9	2	13	3	8	....			2
Enuresis.....	....	....	3	3	....	3	....			....
Retention urine.....	....	1	1	2	2	....	....			....
GENITO-URINARY.										
Gonorrhœa.....	3	2	5	10	9	....	....			1
Orchitis.....	1	....	....	1	1	....	....			....

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Stricture.....	2	12	....	14	5	4	1	....	....	4
Hypertrophied prostate....	1	5	....	6	....	4	2	....	....	....
Phymosis.....	1	1	....	2	2	....	....	....	....	....
Venereal warts	1	....	1	2	2	....	....	....	....	....
Hydrocele .....	....	1	....	1	....	....	....	....	....	1
Septic penis .....	....	1	....	1	1	....	....	....	....	....
Urethral ulceration.....	....	....	1	1	1	....	....	....	....	....
Syphilis ..	16	15	19	50	....	32	....	....	....	18
" congenital.....	....	2	....	2	....	1	....	....	....	1
Bubo.....	1	1	....	2	2	....	....	....	....	....
Chancroids .....	....	2	....	2	2	....	....	....	....	....
SURGICAL.										
Hernia inguinal.....	2	1	3	6	1	....	4	....	....	1
" umbilical.....	2	....	2	4	....	....	3	....	....	1
" ventral.....	....	....	3	3	2	....	....	....	....	1
" strangulated.....	....	....	1	1	....	....	....	1	....	....
Floating kidney .....	....	....	1	1	....	....	1	....	....	....
Perforation of intestine....	....	1	....	1	....	....	....	1	....	....
Erysipelas .....	....	1	1	2	1	....	....	....	....	1
Hip disease.....	1	5	2	8	....	4	1	....	....	3
Potts disease	1	3	....	4	....	2	1	....	....	1
Appendicitis.....	2	1	....	3	2	1	....	....	....	....
Necrosis of jaw	1	....	....	1	1	....	....	....	....	....
Pyæmia .....	....	....	1	1	....	....	....	....	1	....
Senile gangrene.....	....	1	2	3	....	....	....	1	2	....

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Phlebitis			1	1						1
Periostitis	1		2	3		2	1			
Necrosis tibia.	1			1	1					
Medio-tarsal tuberculosis. .	1			1		1				
Prolapse rectum	2		2	4	1		2			1
Fistula-in-ano.	3	3	3	9	1	2	4			2
Hæmorrhoids.			6	6	2	4				
Tubercular adenitis.			1	1	1					
Epithelioma.			2	2	1	1				
Abscess, psoas.		1		1	1					
" alveolar			2	2	2					
" ischio-rectal.		1	1	2	2					
Abscess	1	5	2	8	7	1				
Bubo suppurative.		3		3	1					2
Tubercular wrist.		3		3		2				1
" knee			1	1						1
" sinuses.	1			1	1					
Ulcer, leg.	4	1	13	18	9	5				4
" foot.		1		1						1
" varicose.	5	5	7	17	7	8				2
" syphilitic			5	5	3	1				1
Varicose veins.	1		5	6		3	1			2
Perforated ulcer nose.			1	1						1
Imperforate ano.			1	1						1
Septic arm.			1	1	1					

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Burn.....		2	....	2	1	....	....	....	....	1
Snake bite.....		1	....	1	1	....	....	....	....	....
Contracted tendo achilles...		....	1	1	....	....	....	1	....	....
Talipes valgus.....		....	2	2	....	1	....	....	....	1
Perineal abscess.....		1	....	1	1	....	....	....	....	....
Cut tendons of hand.....		1	....	1	1	....	....	....	....	....
FRACTURES.										
Fracture of ulna.....		....	1	1	....	....	....	....	....	1
“ “ radius.....	2	....	4	6	4	1	....	....	....	1
“ “ jaw.....		....	1	1	....	1	....	....	....	....
“ “ neck humerus..		....	1	1	1	....	....	....	....	....
“ “ tibia	2	....	2	2	1	....	....	....	....	1
“ “ fibula.....	2	....	2	2	....	....	....	....	....	....
“ “ patella.....	1	....	1	....	....	....	....	....	....	1
“ “ tibia ununited..	1	....	1	....	....	1	....	....	....	....
“ “ femur, new....	....	....	5	5	1	1	....	....	....	3
“ “ “ old	5	2	3	10	....	2	1	1	1	5
“ “ scapula.....	1	....	1	....	....	1	....	....	....	....
DISLOCATIONS.										
Dorsal of hip.....		....	1	1	1	....	....	....	....	....
Knee.....		1	....	1	1	....	....	....	....	....
Shoulder		1	....	1	1	....	....	....	....	....
WOUNDS.										
Incised wounds.....		2	1	3	3	....	....	....	....	....
Lacerated.....		3	....	3	3	....	....	....	....	....

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Punctured wounds	...	1	....	1	1	...	...	...	...	...
SPRAINS.										
Ankle.....		1	....	1	1	....	....	....	....	....
Back.....			2	2	2	....	....	....	....	....
Contusion of hip.....	2	2	9	13	13	....	....	....	....	....
WOMEN.										
Cancer uterus			4	4	....	....	....	3	1	1
Prolapse "	1	....	3	4	....	....	3	....	....	1
Fibroid "			3	3	....	....	2	1	....	....
Cancer breast.....			3	3	....	....	....	1	2	....
Ovarian cyst.....	1	....	1	2	1	....	....	1	....	....
Rectocele.....			1	1	....	....	1	....	....	....
Lacerated perineum.			2	2	2	....	....	....	....	....
Cystocele.....			3	3	....	....	3	....	....	....
Endometritis			3	3	3	....	....	....	....	....
Retroversion.....			2	2	....	....	2	....	....	....
Pelvic inflammation.....			1	1	....	....	....	....	....	1
Pregnancy.....			21	21	19	....	1	....	....	1
Hydrorrhœa gravidarum...			1	1	1	....	....	....	....	....
Mastitis.....			4	4	4	....	....	....	....	....
Post-partum hemorrhage..			3	3	3	....	....	....	....	....
Puerperal septicæmia			3	3	2	1	....	....	....	....
Placenta prævia.....			1	1	1	....	....	....	....	....
Abscess breast.....			1	1	1	....	....	....	....	....
Dysmenorrhœa			1	1	....	1	....	....	....	....

DISEASES.	In Hospital, Jan. 31, 1898.	ADMITTED.			DISCHARGED.			DIED.		In Hospital, Feb. 1, 1899.
		Males.	Females.	Total.	Well.	Relieved.	Unrelieved.	Males.	Females.	
Menorrhagia		...	2	2	2	...				...
Vaginitis		...	7	7	6	1				...
Recto-vaginal fistula		...	1	1	...					1
Vulvitis		...	1	1	1					...
Pruritus vulvæ	1	...	2	3	3					...
Totals	267	395	613	1275	366	299	146	91	108	265
<i>Grand total</i>										1275

SURGICAL OPERATIONS.

Larparotomy for ovarian cyst	2
“ “ ventral hernia	1
Amputation of thigh	1
Perineorrhaphy	3
Repair of Coleocele	2
Uterine curetting	5
Fistula in ano	2
Incision and drainage tubercular hip	6
“ “ “ deep axillary abscess	2
“ “ “ septic arm	2
“ “ “ ischio-rectal abscess	2
“ “ “ mammary “	1
Excision of tubercular glands of neck	1
“ partial of jaw for necrosis	1
Plastic operation to restore nose	2
“ “ “ “ palmar tendons	1
“ “ “ skin-graft for large ulcers, leg	6
Ligation of hæmorrhoids	6
Prolapse rectum	2
Internal urethrotomy	1
External “	5
Circumcision	3
Tracheotomy	1
Ligation temporal artery from gunshot wound	1

OBSTETRICAL REPORT.

	Males.	Females.	Total.
Number children born.....	6	13	19
Position O. L. A.....	3	11	14
“ O. D. A.		2	2
“ O. D. P.....	1		1
“ breech	2		2
Still-born	1	1	2
Premature		1	1
Forceps delivery.....		2	2
Placenta prævia.....			1
Post-partum hæmorrhage.....			3
Puerperal septicæmia.....			3
Illegitimate.....			13
NATIVITY OF MOTHERS.			
United States.....			12
England.....			1
Nova Scotia.....			1
Prince Edward Island			1
Ireland			4

U. S. ARMY FROM CUBA, ETC.

DISEASES.	ADMITTED.	DISCHARGED.	
		Well.	Relieved.
Malaria.....	67	66	1
Typhoid fever.....	13	13	
Diarrhœa, acute	4	4	
Bronchitis, "	2	2	
Diarrhœa, chronic.....	1	1	
Hysteria.....	1		1
Heat stroke	1	1	
Muscular rheumatism.....	1	1	
Contusion of chest.....	1	1	
" " knee.....	1	1	
Hæmorrhoids.....	2	2	
Periostitis.....	1		1
Axillary abscess.....	1	1	
Orchitis	1	1	
Suppurated bubo	3	3	
Phlebitis.....	1	1	
Phymosis	1	1	
Lumbago.....	1	1	
Sciatica.....	1	1	
Peripheral neuritis.....	1	1	
SOLDIERS FROM FORT AT LONG ISLAND HEAD.			
Acute bronchitis.....	2	2	
Influenza.....	1	1	
Tonsillitis.....	1	1	
Febricula.....	1	1	
Alveolar abscess.....	1	1	
Inguinal "	1	1	
Acute indigestion.....	2	2	
Hysteria	2		2
Opium poisoning	1	1	
Scabies.....	1	1	
Intestinal hæmorrhage.....	1	1	
Syphilis.....	1		1
FROM U. S. S. "DALLAS."			
Gunshot wounds of head.....	1	1	
Totals	121	115	6

OUT-PATIENT DEPARTMENT.

Showing Number of Out-Patient Diagnoses During the Year.

DISEASES.	Males.	Females.	Total.
GENERAL DISEASES.			
Coryza	103	70	173
Influenza.....	4	2	6
Malaria	7	.....	7
Lumbago	19	8	27
Rheumatism, acute.....	5	2	7
“ chronic.....	53	31	84
Myalgia.....	3	1	4
Phthisis	56	19	75
Anæmia.....	3	5	8
Alcoholism.....	40	18	58
Obesity .....	.....	2	2
Debility	17	10	27
Rheumatic torticollis.....	.....	1	1
Goitre .....	.....	1	1
NERVOUS DISEASES.			
Hemiplegia.....	9	3	12
Epilepsy.....	24	10	34
Neuralgia.....	32	27	59
Insomnia.....	10	3	13
Infantile convulsion.....	.....	1	1
Hemicrania	1	.....	1
Cephalalgia	10	7	17
Sciatica	2	1	3

DISEASES.	Males.	Females.	Total.
Dementia	9	5	14
Neuritis	1	.....	1
Paraplegia.....	2	.....	2
Myelitis.....	1	.....	1
Paralysis agitans.....	1	.....	1
Vertigo.....	5	5	10
CIRCULATORY SYSTEM.			
Heart disease, functional.....	6	10	16
Mitral regurgitation.....	8	2	10
“ stenosis.....	2	1	3
Aortic “	2	5	7
Pseudo angina pectoris.....	1	1	2
PLEURA.			
Pleurisy	3	12	15
Pleurodynia	5	7	12
FAUCES.			
Tonsillitis.....	4	3	7
Pharyngitis	1	.....	1
Nasal catarrh	4	2	6
Elongated uvula.....	1	.....	1
RESPIRATORY SYSTEM.			
Laryngitis	3	.....	3
Bronchitis, acute.....	17	10	27
“ chronic.....	73	24	97
Hæmoptysis	1	.....	1
DIGESTIVE SYSTEM.			
Dyspepsia.....	103	55	158
Gastritis, acute.....	37	34	71
Diarrhœa	68	88	156

DISEASES.	Males.	Females.	Total.
Catarrhal jaundice.....		3	3
URINARY SYSTEM.			
Cystitis.....	25	1	26
Retention urine.....	1	.....	1
Prostatitis.....	1	.....	1
Hyperthrophied prostate.....	4	.....	4
Hydrocele.....	2	.....	2
Dysuria.....	9	7	16
Enuresis.....	7	13	20
Nephritis.....	15	.....	15
Gonorrhœa.....	14	2	16
Stricture urethra.....	15	.....	15
CUTANEOUS SYSTEM.			
Eczema.....	3	6	9
Pediculi pubis.....	5	.....	5
Erythema.....	1	.....	1
Acne.....	1	.....	1
Herpes zoster.....	3	1	4
“ labialis.....	.....	3	3
Psoriasis.....	1	.....	1
SURGICAL.			
Bubo suppurative.....	2	.....	2
Hæmorrhoids.....	4	3	7
Fistula-in-ano.....	2	.....	2
Synovitis.....	1	.....	1
Ulcer of leg.....	27	16	43
“ varicose.....	8	7	15
Frost bite.....	1	.....	1
Syphilis.....	21	7	28

DISEASES.	Males.	Females.	Total.
Odontalgia.....	4	1	5
Potts disease.....	4	.....	4
Hernia inguinal.....	20	3	23
Epithelioma.....	.....	3	3
Fatty tumor.....	2	.....	2
Sarcoma.....	2	.....	2
Concussion brain.....	.....	1	1
Hip disease.....	1	.....	1
Adenitis tubercular.....	2	.....	2
Burns.....	2	3	5
Contusions.....	4	11	15
Wounds, septic.....	4	3	7
" incised.....	7	5	12
Sprains, ankle.....	5	.....	5
" shoulder.....	2	.....	2
" wrist.....	3	1	4
Fractures, radius.....	2	4	6
" rib.....	2	1	3
" tibia.....	1	.....	1
Tubercular wrist.....	2	.....	2
Hallux valgus.....	1	1	2
Varicose veins.....	3	6	9
Abscess.....	2	3	5
Adherent prepuce.....	1	.....	1
DISEASES OF WOMEN.			
Mastitis.....	.....	2	2
Vulvitis.....	.....	2	2
Dysmenorrhœa.....	.....	3	3
Menorrhagia.....	.....	2	2

DISEASES.	Males.	Females.	Total.
Menopause.....		1	1
Cystocele		1	1
NOSE.			
Nasal polypus.....	1	.....	1
Deflected septum.....	1	.....	1
Hypertrophied turbinates.....	.....	2	2
Spur on septum.....	.....	1	1
EAR.			
Otitis media, catarrhalis chronica.....	12	9	21
Effects otitis media, suppurativa.....	7	3	10
Thickened membrana tympani.....	2	6	8
Cerumen.....	11	5	16
Effects otitis media, catarrhalis chronica	2	2	4
Tinnitus aurium.....	4	2	6
Adhesion ossicles.....	3	2	5
Otitis media, suppurativa chronica.....	4	3	7
Destruction membrana tympani.....	2	.....	2
Scarred " "	1	.....	1
Otalgia	2	3	5
Eczema meatus.....	2	.....	2
EYE.			
Cataract	6	4	10
Glaucoma.....	1	.....	1
Pannus	1	.....	1
Optic atrophy.....	3	1	4
Opacity lens	3	.....	3
Ectropion.....	2	3	5
Entropion.....	2	1	3
Conjunctivitis.....	21	17	38

DISEASES.	Males.	Females.	Total.
Myopia	6	2	8
Hypermetropia.....	4	.....	4
Hazy cornea.....	2	.....	2
“ lens	2	.....	2
Floating opacities.....	1	1	2
Phthisis bulbi.....	1	2	3
Choroiditis	3	1	4
Blepharitis.....	2	.....	2
Iritis	10	6	16
“ syphilitic.....	2	1	3
Strabismus.....	2	.....	2
Staphyloma.....	1	.....	1
Retinitis .....	.....	1	1
Nebuli of cornea.....	1	1	2
Leucoma.....	1	.....	1
Astigmatism	1	.....	1
Pterygium	1	.....	1
Stenosis lachrymal duct.....	2	.....	2
Granular lids.....	1	2	3
Ecchymoses.....	5	3	8
Total	1,148	745	1,893

APPENDIX.

*Chapter 395 of the Acts of 1897, as Amended by Chapter 451
of the Acts of 1897.*

AN ACT TO ESTABLISH SEPARATE DEPARTMENTS OF THE CITY OF
BOSTON FOR THE CARE OF CHILDREN, PAUPERS, INSANE PER-
SONS AND CRIMINALS.

Be it enacted, etc., as follows :

SECTION 1. The children's institutions department, the pauper institutions department, the insane hospital department and the institutions registration department, of the city of Boston, are hereby created as departments of said city, and shall be under the charge of the officers herein designated therefor. Said officers shall be citizens or taxpayers of said city, and shall be appointed by the mayor of said city without confirmation by the board of aldermen. The provisions of chapter two hundred and sixty-six of the acts of the year eighteen hundred and eighty-five, and of all other acts relating to the departments of the city of Boston, or the officers or employees thereof, except as otherwise herein provided, shall be applicable to said departments and the officers and employees thereof.

SECT. 2. Each of said departments, except the institutions registration department, shall be under the charge of a board of seven trustees, at least two of whom shall always be women; during the current year one of said trustees for each of said departments shall be appointed for the term of five years, two for the term of four years, one for the term of three years, two for the term of two years and one for the term of one year, beginning with the first day of May in the year eighteen hundred and ninety-seven; and hereafter in the year in which any term or terms shall expire a trustee or trustees shall be appointed for the term of five years, beginning with the first day of May in the year of appointment; any vacancy occurring among said trustees shall be filled by appointment of a trustee as aforesaid for the remainder of the term. Said trustees shall serve without compensation, but all expenses reasonably incurred by them in the performance of their duty shall be paid by said city if approved by a recorded vote of the board of which the trustee incurring such expense is a member. They shall organize on the first Monday of May in each year, or as soon thereafter as may be, by

the choice of a chairman who shall be one of their number, and of a secretary who may or may not, at their discretion, be one of their number. No such trustee, nor any person in the employ of any of said trustees or departments shall be interested in a private capacity, directly or indirectly, in any contract or agreement for labor or for articles furnished for any of said departments.

SECT. 3. The board of trustees for the children's institutions department shall be known as the trustees for children, and shall have, exercise and perform all the powers and duties relating to children, or to any institution or place in which they are confined or detained or cared for, including the house of reformation, now conferred by the statutes of this Commonwealth upon the institutions commissioner of the city of Boston, except as to children lawfully committed to or detained in institutions established for the care and custody of the adult insane paupers and criminals.

SECT. 4. The board of trustees for the pauper institutions department shall be known as the pauper institutions trustees, and, except as otherwise provided by section three of this act, shall have, exercise and perform all the powers and duties relating to poor and indigent persons, or to any institution or place in which they are confined or detained or cared for, now conferred by the statutes of this Commonwealth upon the institutions commissioner of the city of Boston.

SECT. 5. The board of trustees for the insane hospital department shall be known as the insane hospital trustees, and shall have the general care and control of the Boston lunatic hospital established by the city of Boston under the provisions of chapter one hundred and thirty-one of the acts of the year eighteen hundred and thirty-nine, and all other hospitals that said city has established, or may hereafter establish, for the care or treatment of the insane, and the same shall hereafter be known as the Boston insane hospital; and said trustees shall have all the powers relating to the insane and to the institutions in which they are confined, conferred by the statutes of the Commonwealth upon the institutions commissioner of the city of Boston.

SECT. 6. The institutions department of the city of Boston shall hereafter be styled the penal institutions department, and the institutions commissioner shall hereafter be styled the penal institutions commissioner, and he shall continue to have, exercise and perform all the powers and duties now conferred by the statutes of this Commonwealth upon the institutions commissioner of the city of Boston not conferred by this act upon any other officer or board of trustees. The penal institutions commissioner may, with the approval of said mayor, appoint one assistant.

SECT. 7. The institutions registrations department shall be under the charge of the institutions registrar, who shall investigate all questions relating to the settlement of paupers, to the commitment of the insane, or to the agency for discharged prisoners,

or to any rights, duties or liabilities connected therewith, and report thereon to the department interested therein; and shall perform such services relating to the accounts and to the collection, registration and tabulation of statistics relating to said departments, or any of them, as may be required of him by said mayor or by the officer or trustees in charge of any of said departments, with the approval of said mayor. Said registrar shall receive an annual salary of three thousand dollars, or such other salary as may be fixed by ordinance.

SECT. 8. Said mayor shall quarterly, in the months of June, September, December and March, and at such other times and at such places as he shall appoint, hold conferences, at which may be present said penal institutions commissioner, said institutions registrar, two members of each of the aforesaid boards of trustees, to be selected by such boards severally, and two members of the board of overseers of the poor, to be selected by such board, to consider any subjects relating to the work of said departments, or of any two or more of them, or to the co-ordination of such work, and at said conferences said mayor shall preside.

SECT. 9. The city of Boston may take and hold any real or personal property which may be given, granted, bequeathed or devised to and accepted by it for the benefit of any one or more of said departments or of the persons under the care thereof. Such property or the income thereof shall be used, applied and disposed of according to the lawful directions of the donor thereof, by the officers in charge of such department or departments.

SECT. 10. Any officers or employees of the institutions department of the city of Boston, whose tenure of office or position may be affected by this act or the carrying out thereof, may be appointed to similar positions in said city at any time within six months of the passage of this act, without civil service examination or enrolment.

SECT. 11. No veteran holding an office in the institutions department of the city of Boston shall be removed or suspended, or shall, without his consent, be transferred from such office or employment, except after a full hearing before the mayor, and at such hearing the veteran shall have the right to be present and to be represented by counsel. Such removal, suspension or transfer shall be made only upon the written order of the mayor. — [*Approved May 13, 1897.*]



ANNUAL REPORT
OF THE
PENAL INSTITUTIONS DEPARTMENT
FOR THE YEAR 1898-99.

OFFICE OF PENAL INSTITUTIONS COMMISSIONER OF THE
CITY OF BOSTON, 32 TREMONT STREET,
BOSTON, MASS., February 1, 1899.

HON. JOSIAH QUINCY,
Mayor of Boston :

SIR, — It is with pleasure and gratification that I report that the institutions of this department are in excellent condition and that, while it may not be said that they are satisfactory in every respect, yet they are beyond reasonable criticism and are making progress in conservative ways towards the best results in prison administration.

REFORM IN PRISONS.

It is not to be expected that reform in every respect can be accomplished in a year or two years. Durable and permanent reforms can be realized only by their introduction in slow, sure, and correct manner. Evolution rather than revolution is what produces permanent improvement. A radical change of thought regarding the treatment of misdemeanants and convicts has occurred in the world in fifty years, a recent time, and it is hard for those familiar with the older-

time thought to enter into sympathy with the newer, nobler ideas regarding the treatment of those confined in our prisons.

The wise thought of prison reformers requires that all prisoners should be treated with a view to their reformation, that their restriction of liberty should bear hardly upon them but not harshly, that they should feel their imprisonment just so much as would operate to make them fear the repetition of the punishment, but not that they should be treated unkindly or cruelly. This middle ground is one that is difficult to tread, and it demands wisdom, intelligence, firmness, and discretion in order to meet the sentimentalist reformer on the one hand and the practical, rigid person on the other, — the one who shrieks with horror if sheets are not on the bed of every prisoner, and cares not if the honest poor have fires to warm them; and the other who says, when observing some amelioration of hard conditions, "You are treating them too well." Between these extremes is the middle ground of hard discipline without cruelty, of kindness without weakness, of helpfulness without mawkish sentimentality. It is upon this middle ground that I have tried to step in the administration of the affairs of this department, and I firmly believe that it is the only path by which intelligent, rational, and enduring reform can be effected, and the penal institutions of this county and city be made to occupy the place they should attain, and to which it is my desire they should reach, — to be the models of prison administration, to which should come the citizens of other cities and countries to study our methods. In comparison with the world we are not behind in prison methods in our institutions, but we are not where we might be, and where we will be with proper effort along the lines indicated.

One of the difficulties in the proper administration of our prisons is the survival in them of the old-time thought and feeling towards prisoners, the mistaken idea that harshness is discipline and that a prisoner has lost the rights of a man by being confined. This feeling is disappearing from our prisons, and although habits and customs are hard to change, we are making progress steady and sure towards its total abolishment from them.

DISCIPLINE.

In my report for last year I spoke of the improvement in discipline in the Houses of Correction, which was shown by the comparative statement of the punishments during the

year previous with the current year, noticing their decrease. I call your attention also this year to a still further decrease in the number of punishments from last year. The number of inmates at the Deer Island House of Correction that were punished last year was 606, and the number of days spent in solitary, 1,786; the number of prisoners punished this year was 477, and the number of days spent in solitary, 1,303. At the South Boston House of Correction last year the number of inmates punished was 354, and the number of days spent in solitary, 846; the number of prisoners punished this year was 311, and the number of days spent in solitary, 465.

One of the means adopted to bring about a better condition of discipline has been the frequent conferences of the Commissioner with the officers of the institutions, which occur very nearly monthly. These meetings have been fruitful of so much good that they are now established as a permanent feature of the department work.

RULES.

The rules that were adopted last year for the government of the institutions of the department have been found to work excellently well in practice, and, with a few additions and changes which were made during the year, are producing beneficial results. During the year it has been necessary to call the attention of the officers in but one or two instances to any violation of the rules. On the whole they have been cheerfully and thoroughly obeyed.

LABOR.

On the first day of January, 1898, the new laws relating to labor went into effect, which resulted, during the establishment of the new system, in a complete lapse of work at both institutions; but at the present time the men are fairly well employed, and, with the additions that are contemplated, they will soon have sufficient employment. I regret that the labor is such as it is in the prisons, and wish that the men might be employed in more severe tasks. I have given the matter some attention during the past year, but have been unable as yet to recommend to the General Superintendent of Prisons any change in the work of the institutions; but it would be a matter very gratifying to me if some work might be suggested by which the men would be taken from the sewing machines and given employment more suited to their physique.

PENSIONS.

It is my desire to establish a system of pensions in this department, in order to provide for the retirement of some of the faithful servants of the county that have arrived at an age where it is no longer proper that they should be retained in charge of the class of people that we have in our institutions. It is improper that they should be discharged, after years of faithful service, without some provision being made by the county for taking care of them in their old age. In the institutions of this department there are a number of such instances where it would be desirable, not only for the department but for the individual, that they should be retired in the same manner that members of the police and fire departments are, and I would respectfully suggest that the Legislature be petitioned to extend the same privileges to this department that prevail in those departments.

POPULATION.

There has been a gratifying decrease in the population at the Deer Island House of Correction, the number there at present being the lowest since 1893. The population on January 31 of the years since 1892 is as follows:

1893	1,015	1897	1,765
1894	1,373	1898	1,683
1895	1,470	1899	1,307
1896	1,519		

Causes for Decrease.

The causes of this decrease in population are difficult to establish. There has been no change in the law that would account for it, such as occurred in 1891, the effect of which is after stated. I am inclined to attribute the decrease to many of the changes in method and administration that have been made within the last two years rather than to any one particular cause. The helpful, cordial relations existing between the honorable justices of the courts of the county and this office have assisted us in many ways to not only relieve the institution of a large population, but to assist these unfortunates to a better course of life. The active co-operation of the Probation Officer, Mr. Keefe, with the agents of this department has also assisted in this way, and I desire to speak here highly of the probation system of this county as administered by him and his subordinates.

Pledges.

The requirement that those released on probation shall pledge themselves to abstain from the use of intoxicating liquors for one year, which pledge is taken before the clergyman of the denomination to which the man belongs, is also responsible for a portion of the decrease I am assured. In this work I wish to acknowledge the earnest co-operation of the Rev. P. H. Brennan and Rev. William H. Toulmin. The former in particular has made this requirement an earnest religious observance, and in that manner has added much to its value as a check upon those whose appetite for intoxicants requires an aid stronger than their own weak wills. I also credit a large portion of the decrease to the influence of the Mission for Catholic inmates, which has been held at this institution.

Employment for Discharged Prisoners.

The work of this office in procuring employment for discharged prisoners, and in the returning of them to the influences of their homes and friends, has without doubt operated to produce a considerable portion of this decrease. Of this mention is made later.

Tobacco.

I credit a portion of the decrease to our non-issue of tobacco to the inmates of the institution, for the men, forced to abstain from one vice, are strengthened in their abstinence from the liquor habit. I am much gratified with the discontinuance of its issue in our institutions. Under the former system it was a regular issue, as food was issued, and many who had never used tobacco for chewing acquired that habit during their confinement. The results of its non-issue are apparent in the cleanliness of the institutions and the appearance of the inmates, and the beneficial results of the same are not to be measured solely by the saving to the county of \$3,000 a year, which was about the cost under the old system.

Spanish War.

Another reason, a small one, however, has been the late war, which undoubtedly had effect in taking into the army some of those who otherwise, without employment, would have become inmates of our institutions.

Loafers' Hall.

To the abolishment of Loafers' Hall at this institution should be credited a part of the loss in population. This attractive place for loafers, where talk, telling stories, and lazy fellowship prevailed, having been abolished, and the men being locked in their cells when not employed, has given them, in place of opportunity of acquiring more viciousness, more tolerance of vice, more sympathy with it, an opportunity for serious reflection, and thus perhaps led many to doubt the wisdom of their longer persistence in their former courses of life. I am led to attribute much to this change, for it is from the recidivist class that our falling-off in numbers has largely come.

Library.

The regular issue of library books to the inmates has assisted, by broadening the minds of the men, to lift them out of their sodden condition, and should be given credit for a certain amount of the decrease.

Whichever of these causes is most to be attributed with the decrease it is impossible to state, but it is decidedly to be desired that the decrease may continue.

TEMPERATURE, INFLUENCE OF.

One of the most prevalent ideas is that there are more people sentenced to our institutions in the winter than in the summer. Why such a thought should be established so firmly in the minds of the community it is impossible to say, but it is certainly widespread among the people in our city, who suppose themselves familiar with our institutions. The contrary is true. A review of the figures for the past five years shows that the population in the Houses of Correction of the county is larger in the months of June, July, and August than in the months of December, January, and February. The figures are as follows:

HOUSE OF CORRECTION, DEER ISLAND.

1894-95.

June	767	December	705
July	846	January	579
August	913	February	507
	2,526		1,791

1895-96.

June	772	December	704
July	779	January	734
August	763	February	686
	2,314		2,124

1896-97.

June	945	December	1,081
July	891	January	814
August	956	February	648
	2,792		2,543

1897-98.

June	1,120	December	858
July	1,010	January	733
August	1,101	February	649
	3,231		2,240

1898-99.

June	932	December	728
July	812	January	589
August	930	February	480
	2,674		1,797

This state of things is not singular with us ; it prevails also in England. In 1896 the number of prisoners received in the three winter months at all the prisons of that country was 38,175, and in the three months of summer, 44,216. These figures lead naturally to the question, Does the rise in temperature operate to produce more offenders against the law ? An investigation of this question seems to demonstrate that it does. One reason for this is that there is more money distributed among the people in summer, and therefore there is more to spend in drink and other forms of dissipation ; also, people are more in public view, where they come under the eye of the police, than in the winter months ; but, leaving aside these reasons for the increase of the population of our prisons in summer, there seems to be reason to believe that the warmer season has a direct influence upon the nervous organization of the individuals of a community, which influence leads to aberrations of conduct and to sudden and violent excesses. If we take those removed from the causes mentioned, increase of money and social movement, we find more unrest with them and more infractions

of discipline in warm weather than in cold. Among the inmates of our institutions we observe the same effect produced by temperature, as shown by the number of punishments in those periods quoted. In the South Boston House of Correction, with a stable population of about 500 at all times, the number of punishments in the winter months is much less than in the same period in the summer. The following table shows this :

PUNISHMENTS IN HOUSE OF CORRECTION, SOUTH BOSTON.

1894-95.

June	58	December	61
July	154	January	50
August	38	February	47
	250		158

1895-96.

June	56	December	64
July	58	January	34
August	40	February	47
	154		145

1896-97.

June	39	December	24
July	67	January	18
August	57	February	24
	163		66

1897-98.

June	34	December	25
July	26	January	25
August	30	February	21
	90		71

1898-99.

June	34	December	19
July	35	January	21
August	22	February	29
	91		69

In one of the principal London prisons the daily average of punishments was 9+ per thousand in June, July, and August, and 7+ in December, January, and February.

These figures indicate that cosmical changes affect society in a way that brings about an increase in misdemeanors and that in prisons, at least, if not in the courts, the offender should be judged more leniently in the times when the temperature is abnormally high.

TREATMENT OF DRUNKENNESS.

In my report for last year I spoke of the expense of the maintenance of those convicted for drunkenness, and, during the past year, I have given the matter more than usual attention. I am of the opinion that we are not at the present time doing the best we can for this class of misdemeanants or for the community, but I do not think there should be radical changes made in our laws. It appears to me that simple changes will, without changing our practice of years, produce better results to both interests—the community and the offender. One simple change that I would recommend would be the establishment of a more equitable scale for terms of imprisonment for non-payment of fine. Now a man fined five dollars, if the fine is not paid, serves the same length of time as the man who is fined ten or fifteen dollars. This seems to me unjust, and I would advocate such a change as would require that a man should serve one day for each dollar he was fined; if fined five dollars, he should serve five days; if eight dollars, eight days; if ten dollars, ten days; and so on. I would also suggest other changes, as follows:

1. A person guilty of drunkenness by the voluntary use of intoxicating liquors, if not then and there proven to have been convicted of a like offence once before within the next preceding twelve months may be released by the court or trial justice.

2. A person convicted of a like offence once before within the next preceding twelve months, but not within six months of his present conviction, shall be punished by a fine of one dollar or imprisonment for two days in the House of Correction or goal; if within six months, a fine of five dollars shall be imposed or five days' imprisonment.

3. If proven guilty of a like offence twice before within a year, and not within six months, he shall be fined ten dollars or ten days' imprisonment at the House of Correction or goal; if within six months, fifteen dollars or fifteen days' imprisonment.

4. If proven guilty of a like offence three times within a year and not within three months, fifteen dollars or fifteen days' imprisonment; if within three months, he may be

committed to the House of Correction or gaol for a term not exceeding six months.

In lieu of being released or sentenced as above, the Court may, in its discretion, place the person upon probation for a term not exceeding five weeks, at the expiration of which time, if the person comes into court and the report of the probation officer is favorable, the complaint shall be placed on file. If the report is not favorable, or if the person is surrendered into court by the probation officer before the expiration of the probation term, the Court shall impose the fine as herein named for a second offence.

CLASSIFICATION OF PRISONERS.

I have given much study to the different systems of classification proposed by persons generally without experience and expressed with much vagueness of detail, for none of them but are accompanied by the statement that all cannot be explained, but much must be left to be worked out; but I have been unable to approve any system of herding prisoners according to these different plans, and I am decidedly of the opinion that classification is simply individualization. The difficulties of classifying in any other way are insurmountable, and the absurdity of any other system amounts to childishness, and is only born of ignorance of prisoners and prisons. Shall we classify according to offences? If we attempt to do this we will soon find that among venial offenders of one grade are many who have been previously convicted of more serious offences. If we classify according to number of convictions, we will soon find differences of education, disposition towards reform, and receptivity of reformatory measures, and oftentimes we will find among the less serious offenders one who will do much to corrupt his fellows and injure discipline.

Shall we classify according to age? Such classification would be manifestly improper for age is not at all a guide for viciousness. The sole classification that will be of service can be made only by the study of the individual character of each inmate. The man must be studied and the questions asked regarding each, Is he a probable subject for reformation? to what influences will he yield? is his environment in life such as will assist him to become a better man? how can he be helped to a better life?

In other words, classification is individualization, and only by such individual study of men can any scheme of reform be made possible. And such study of men should be made

by every prison management—not to make convicts into classes and allow them to work out their own reformation and think that its duty is done, for it is as bad management to jumble convicts into a class and allow them to look out for themselves as it would be to place them altogether and allow them to make their own classification. A classification that is not good it would be inadvisable to adopt, and I have yet in my experience to have presented to me, nor have I found in my studies, any classification except that based upon behavior in prison that accomplishes anything in the way of reform; and that classification can be made in any prison, and is made to more or less extent in the prisons of every civilized community.

Classification can be made in those physically sick, such as the separation of syphilitics from those afflicted with other diseases, the sane from the insane, but only by individual study. And so with those mentally sick, the disease must be individually diagnosed. To say that a man who committed larceny to save his family from starving should be classed with the thief who steals to gratify his lust or the desire of a mistress is a classification that is unjust, immoral and dangerous to society. Even the classification of those physically sick has its dangers, for among those afflicted by syphilis may be the extremes of the bad and the good, the vicious and the innocent; then how difficult to classify those who are mentally sick?

“Who can minister to a mind diseased?” Certainly no one without an infinity of study and close attention to every detail. The mental processes that bring a man into our prisons are as different as there are persons in them. There are certain moving causes, large in themselves—Avarice, Lust, Revenge, and Drunkenness—that are prime factors, but a classification on this basis would be most difficult to arrange and adjust.

Ferri says: “All classifications that have been set forth amount to a recognition of four types, the born, the insane, the occasional criminals, and the criminals of passion,” and then says, “I must frankly decline to accept the authority of those who put forward classification more or less symmetrical without having made a study of criminals.”

Classifications all differ; if not in major particulars, in minor ones. Some are purely anthropological, others based on the organic or psychological characteristics of criminals, such as those of Lacassagne, some on the influence of punishment, and some like those of Ferri, which are based upon the natural causes of crime, individual, physical, and social.

But all classifications must be based upon individual study, and to bring about a classification, meaning a segregation of those unlike inclined, would require as many sub-divisions of a prison as there are inmates. And this it appears to me the wise way of classification, — to henceforth construct our prisons upon the separate system and to classify our prisoners upon the individual line; then, by placing in charge those in sympathy with the reform of prisoners, to work out the best in the modern views of the treatment of criminals. But the best form of government will fail in incompetent, weak, or corrupt hands; so our ideal system of prison reform must be intrusted to those only in sympathy with its ideas or it will fail entirely. It is not the system so much as it is those who administer it that makes its success or failure.

It is easy for the amateur and those not informed in prison management to prate of classification, as though it were simple and easily attained; but a little thought will demonstrate that it means a close study of the offender, a study more complex than that to diagnose a physical disease, and this study can be only made by segregation of prisoners from each other and by those familiar with them and the environments from which they come.

W. Douglas Morrison says, regarding this matter: "As to the best method of dealing with the actual criminal, the first thing to be done is to find out what sort of a person you are dealing with. He must be studied at first hand."

The statement of the Rev. John Clay in his *Life* also confirms my thought in this matter: "I believe it to be *beyond human power* safely to classify prisoners. I dare not trust even six or eight prisoners in any class or association which leaves conversation free."

TREATMENT OF PRISONERS.

There are two principal views regarding the treatment of inmates of our prisons; viz.: 1. That they are responsible, and are imprisoned for punishment. 2. That they are irresponsible, and, if imprisoned at all, should be confined as a protection to society.

The first view is well represented by the following article by Thomas Walker, M.A., a police magistrate of London. Judge Walker was graduated as B.A. from Trinity College, Cambridge, in 1808, and as M.A. in 1811. The following article was written in 1835, when Mr. Walker was fifty-one years old and after he had been a magistrate for six years. It is valuable as showing the old-time feeling regarding

prisoners, held by an educated person who had been brought into close connection with them :

Prison discipline, like many other subjects which occupy public attention, is not worth the time and expense which is bestowed upon it. After the repeated experiments that have been made to reform criminals in prisons, and the signal want of success, I should think the hope must by this time be given up even by the most sanguine. I believe that after the immense expense that has been lavished upon the attempt, the instances of reform really attributable to the system, do not amount to one in five hundred; and if it is calculated how many might have been saved from a prison at all by the application of the same means to the purposes of good government, it must be concluded that prison discipline with a view to reform is a great deal worse than useless. But it is bad in another point of view. The sole end of imprisonment ought to be punishment, in order to deter from crime, and punishment by a separation from the world and all its advantages; and the greater the contrast the greater will be the punishment. Now, in the reform system, however strict the discipline is professed to be, there is necessarily a degree of attention and indulgence which much mitigates the pains of imprisonment, and causes the criminal to quit his confinement with any feeling but of that dread which ought to operate as a lesson to himself and a warning to others. To the neglected wretches, who form the bulk of prisoners, a reform prison offers no terrors. They do not like confinement and regularity, but then they find so many sets-off in the attentions they meet with, and the comforts provided for them—that is, comforts compared with their frequent privations—and their physical state becomes so much improved, that when they come again into the world, their retrospect is far from one of unmixed repugnance to a prison life; and if they return, as they generally do, to their vicious courses, the sufferings they bring upon themselves must make them frequently almost sigh after a renewal of restraint. It often occurs to me, when I am committing disorderlies to prison for short periods, that to many of them the prospect of control is not altogether disagreeable; and if we reflect what sufferings they must entail upon themselves by their gross irregularities, it is not to be wondered that it should be so. I consider, then, all attempts at reform within the walls of a prison as misplaced, and as contrary to and as defeating the true end of imprisonment, which should present a striking contrast to a state of liberty and its enjoyments.

The second view is shown very clearly by the statement of Lombroso, who represents the advanced thought of to-day in this statement from an article in "*La Espana Moderna*" where he says : "The old Penal Codes can no longer be based on the supposition of man's responsibility, which is no longer accepted by any one, not even by the most orthodox or the most sturdy and stanch believers in everything of the past;" and by that of Garafalo, who, in his work on Criminality, says that crime is either the result of an inborn instinct to commit crimes, existing in some human creatures, or of a defective instinct of pity or of honor, which is wanting in

their organization. He believes in doing away with personal confinement of any kind, but that the community should lay down laws requiring misdemeanants to give compensation for their misdeed not only to the person they have injured but also to the State for the cost and trouble occasioned by this misdeed; and by that of Lévy-Brühl, who maintains that the surroundings and parentage exert the most potent influence in forming a malefactor or an honest man, and that the seeds for a murderer or thief are laid even before his birth, and says: "These unfortunate creatures deserve rather our pity than aught else. Let us rather remove the causes that produce these evils; let us rather pass laws for the improvement in the condition of the poor and destitute, so that the evil seeds are allowed no chance of finding a soil."

For myself I am free to say that while not accepting the extreme views of those who hold the second view, and believing that the prime object of the separation of the criminal from society is its protection, I agree more with the second view than with the first, and believe that every prison should be a reformatory. It should be penal in character only so far as punishment is conducive to reformation. The punishment of the criminal alone is revengeful, and that is not compatible with the dignity of a State. I understand the term House of Correction to mean one where the habits of men are to be corrected, and not that it is a house for the administration of correction in the sense of punishment; and this thought is supported by the report of the commission that recommended the first of the Houses of Correction for England in 1778. In the report of that commission, which was composed of Sir William Blackstone, Lord Auckland, and John Howard, occurs this language:

It is hoped by sobriety, cleanliness and medical assistance, by a regular series of labor, by solitary confinement during intervals of work, and by due religious instruction, to preserve and amend the health of the unhappy offenders, to inure them to habits of industry, to guard them from pernicious company, to accustom them to serious reflection, and to teach them both the principles and practice of every Christian and moral duty.

A prison conducted upon these lines could not help but be a reformatory in every sense. To think because you change the names of places of imprisonment from Houses of Correction to Reformatories that you have changed their character is absurd; as well to think you will change the nature of a man by changing his name. Reformatory methods should have place in every prison, and these influences should exist

not only as a living force constantly at work in it, but it should continue in the assistance of the prisoner to make his footing in society secure when he leaves the prison. It should be exercised in the prison by a discipline strong yet kind, firm but humane; prisoners should not be abused by word or deed. In every way the prisoner should be made to understand that while he is confined for the good of the community, yet all is not lost, and that he is still a person that society desires will become again a self-respecting and respected member of it. To that end I insist that every inmate shall be treated with all the respect due to him, that he shall not be abused. It is an erroneous idea that all in the prisons are of the criminal habit or are criminals in the sense that they are separated from the non-criminal people of the community. In every sense the inmates of a prison are like the rest of the people, and to deprive them of their self-respect is as much of an injury to them as it is to the person outside, and it is an injury to the community also for it prevents reformation, and tends to make recidivists of those who have lost the backbone of all reformation, their self-respect. No man can reform without his manhood is respected. The thought to be inculcated in their minds is that they are men, erring men if you please, but men to whom the world is open for a better and a wiser life. With this thought for a cardinal principle, that all men are brothers as children of One Great Father, I believe the theory of the true management looking to the reform of prisoners is found.

Warden Nicholson, of Detroit, well says: "There is no secret how to properly care for convicts. We have reached that condition of rational development where reason must take the place of effusive exhibitions of sentiment, and practical methods, suited to the exigencies of the case, supersede the fanciful schemes pushed forward as reform measures. The Gospel unadorned will dictate to an unwarped conscience all that is needful in any case."

RESULT OF PRESENT SYSTEM.

In thus stating that our prisons should be reformatories, and that in them there should be a spirit of reform, an uplifting influence to bring the inmates into a better course of living, I would not be understood it is my opinion that they may be made to produce ideal results and that the course we are now pursuing in the treatment of our criminals is one that is capable of producing even good effects, for I believe, from the study of the matter and from observation

of statistics, that our whole system of the treatment of criminals is unproductive of an amount of good that justifies its continuance on the present lines. That the system does not operate to prevent crime is certainly shown by a study of its statistics. In no country in the world where reliable statistics are gathered can a lessening of crime be shown. The returns are discouraging to the penologists of every nation. In Great Britain, although thoughtless people, deceived by the lessened number of inmates of prisons, speak of the wonderful diminution of crime there, reliable statistics show that crime and misdemeanors have really increased to the amazing amount of 101 per cent. in the last forty years,¹ and that the lessened number of inmates in their prisons is caused by the changes in the laws, which changes substituted fines for imprisonments and sent juveniles to other institutions than prisons. A similar change in our laws against drunkenness in 1891 reduced the number of commitments for that offence to Deer Island from 6,933 to 2,562 in a single year, and by another change in the law the next year increased the number to 4,430. It is not fair either to take the number of convictions in court as a basis to work on, for a probation system may operate to cause aberrance in our returns; nor can we take the number of arrests, for under some police systems they would be more than with others. For instance, policemen might at one time be instructed to clear the streets of beggars, vagrants, drunkards, and prostitutes, and at another time the regulations regarding them might be enforced with laxity or negligence.²

With all these difficulties in the way of making an exact and unimpeachable estimate of the increase or decrease of criminal offenders, it is strongly asserted and believed by those best competent to know that the number of offenders against the law is continually and alarmingly increasing.

Professor Von Liszt, of Germany, says our existing penal systems are powerless against crime. Dr. W. D. Morrison, of H. M. Prison Wandsworth, asks: "Why are our penal methods so helpless and discomfited in the face of the criminal population? Why do the combined efforts of legislators,

¹ In the period between 1857 and 1861, 482,590 persons were tried at the Assizes and Quarter Sessions of England and Wales, while in the period between 1892 and 1896, 873,647 persons were tried at the same courts. The number of persons committed to local prisons between 1868 and 1872 was 774,667, while between 1884 and 1888 the number was 898,486.

² As an illustration of this the following shows most clearly: In the reports of the Commissioner of Police of London for the years 1886 and 1888 the number of females convicted of annoying male persons for purposes of prostitution were respectively 3,233 and 1,475. This great change shows that the attitude of the police to this offence had changed.

judges, police and prisons produce so few practical results?" And so it is all over the world. The general feeling among those who make a study of our prisons is that our penological system is a failure in that it does not produce the result for which it is instituted, the protection of society.

It may be said that we are doing all we can, that it is an incurable disease, an ineradicable defect in society, and, that like the poor, we are always to have the criminal with us; but I earnestly believe that some system can be devised by which we can limit and restrict the increasing inmates of the prisons of the country. That they are increasing is shown by the following table from the U. S. Census:

Year.	Prisoners.	Ratio to Population.
1850	6,737	1—3,442
1860	19,086	1—1,647
1870	32,901	1—1,171
1880	58,609	1— 855
1890	82,329	1— 757

GOVERNMENT, RESPONSIBILITY OF.

It may be that the fault lies not in our treatment of the criminal after he has committed the offence, but in a defective organization of society, a fault in government, that makes gaols and prisons a place of refuge for the despairing and helpless as well as a place of confinement for the vicious and indolent. Mr. Justice Walker, in the same article from which I have quoted, places the blame for the mass of criminals upon the government in the following words:

The second object of prison discipline, and that which certainly is now occupying public attention is to render prisons as effective places of punishment as possible; but this under efficient government out of doors, would be a very simple process indeed. My objection to the course pursued is, that it is turning attention in the wrong direction, and causing neglect where attention is most of all wanted. If I were asked what I thought would be the best mode of prison discipline for diminishing the present mass of crime, I should answer that there ought to be no such mass, and that the question is not a question of prison discipline but of government. Prison discipline is no cure for systematic crime to the present extent existing, but the cure is to be found in government discipline independent of prisons. Isolated crime only is that which cannot be altogether prevented by good government, and it is the proper object for punishment and prevention by imprisonment. Supposing systematic crime to be done away with by good government, then, and not till then, comes the question of prison discipline in its true and very narrow limits. I have remarked before that imprisonment should present a striking contrast to liberty and its enjoyments. There are two ways of effecting this: One, which is the way at

present being pursued, is to make imprisonment very severe; and the other, which is the way that ought to be pursued, is by improvement in government to render liberty and its enjoyments as sweet as possible, so that a simple separation from them, within four walls, may be sufficient punishment without any refinements and contrivances of severity. A necessity for severe punishment is a scandal to a government. When the inside of a prison is made the subject of great attention, it proves that what is on the outside is the subject of great neglect. Govern men well, and crime will be infrequent, and simple confinement sufficient punishment. Individuals above the neglected mass are not deterred from the commission of crime by any consideration of degrees of severity of confinement, but by confinement itself, and if there were no neglected mass there would be no necessity for what is called prison discipline; it would not be worth a thought. If an agriculturist were asked how to clear a marsh from weeds, he would answer, "Drain it, and what springs up after will be easily subdued." So, to clear the country from crime, govern well, and the individual cases which arise, will be disposed of without difficulty. Great as is the quantity of crime at present existing, it is to me quite astonishing, considering the quantity of neglect, that there is not an immense deal more, and thence I infer that, with adequate attention in the proper direction, there would be an immense diminution. The principal means of accomplishing this is by moral influence to be derived from improved parochial government, carried on by the most worthy part of the community, most of whom now take no part in public affairs, or employ their efforts on expedients for government, instead of in government. This is the only system for a free and Christian country, and to this we must come.

Commander Booth, in "Darkest England," says, "the gaol is our specific for despair. . . . When all else fails, Society agrees to care for a man if he will commit crime."

If the fault lies with the government, that way back of our prison system lie the causes which make our criminals, then as penologists we have nothing to do except to make the best of our conditions as we find them and endeavor to handle this mass of crime as well as we can. It does seem to me to be demonstrated that much of the increase of population in our prisons is caused by forced indolence, and that if Society could so arrange matters that all could be employed, that much would be done to relieve our institutions of their population.

I believe that one of the rights of a man is that he should have employment at a living wage; that for every pair of hands there should be work. It is unjust to punish a man for having "no visible means of support," when the Society, which punishes him, does not furnish him opportunity to acquire the means of support. To say to a man who has become shoeless and haggard and careworn in the search for employment, "Why do you not work?" is cruel and absurd;

and well may such a man, in perplexity at the conditions surrounding him, give up and take to liquor as a means of securing employment and a comfortable home under sentence rather than to longer seek for means of securing bread and be given a stone. It is not a proper punishment for a lazy, heedless, careless individual to give him a home and care superior to his own as a punishment for his heedlessness, nor is it such for a man who desires work and cannot get it.

In a newly-formed community, where work is to be had for all, there are few vagrants or drunkards; but as Society becomes more organized, and when it should be easier to arrange for all to be employed, then comes the time when men walk the streets and return to their starving families with no money or bread.

I am assured that the cure for drunkenness and vagrancy is work, and that fifty per cent. of those confined for those offences would be good citizens, a support to the body politic, if they could secure employment permanent and at a remunerative wage. I am aware that efforts of Society to furnish work for the unemployed have not attained any measure of success,—notably the government workshops of France, under the Provisional Government of 1848, which were instituted at the suggestion of Louis Blanc,—and I have no positive ideas upon the subject at the present time to urge upon the public mind; but it seems to me that as all treatment of drunkenness has heretofore failed to accomplish the results to be desired, that we should attempt to ascertain what we can do towards its prevention by way of furnishing work to those who may fall into the habit if they are left with idle hands.

Mr. John Graham Brooks, in the “Annals of the American Academy,” made four suggestions as to the problem of the unemployed that it seems to me are practical and that would be efficient in providing for this class:

1. *Employment bureaus* distributed over country and city districts with investigation so organized that it can do its work before it is too late to manage the applicants.
2. *Adequate graded work tests* that shall convince the public that the applicant has been taken fairly at his word and offered what he claims to be seeking—work. Such work tests separate the beat in every variety from those for whom something may be done, because of the will to do something.
3. *Trade Schools* (agriculture included) to which those can be sent who have accepted the tests and proved their *willingness* but lack of skill and capacity.
4. *Places of discipline and training* (farm colonies and workshops), to which those who are able, but deliberately refuse to work, can be sent as to a prison, where they shall be kept until they prove their willingness and ability to earn an honest livelihood.

The work of the first recommendation is done by this department with much success, in the aid of the discharged convict; but how much better if it were done before the man became an inmate of one of our institutions, and he made self-supporting, and the city in many cases saved the support of his family.

AIDING DISCHARGED PRISONERS.

One particularly gratifying work of the department, and one that I believe is doing a greater amount of good for the money expended than almost any other form of public expenditure, is that of aiding discharged prisoners to re-establish themselves in the world on their release from prison. Without such aid as we furnish them many of them would be unable to maintain themselves and would be obliged to beg or steal and, thus violating the law, would probably be returned again to our institutions, and, becoming hardened to prison life and by the treatment of the world in refusing work diligently sought for, would sullenly accept their fate and become of the ranks of the recidivists, to populate our institutions for an indefinite time. I desire to say that for the success of this work I am much indebted for the able, painstaking, and sympathetic work of the agents in charge, Miss Katherine Berran and Mr. James F. English. Their reports will be found in the appendix, and will show the details of their work.

HOUSE OF CORRECTION, DEER ISLAND.

This institution has maintained, in the same manner as for years past, its excellent standing in comparison with other prisons.

During the year, Ward A, which was destroyed by fire a year ago, has been occupied. The wooden ducts, which were a menace to the safety of the hospital, have been replaced by those of galvanized iron.

The library has been constantly increased during the previous year, and I believe it now stands well with any library in a similar institution in this State.

The Assembly Room is very much appreciated, furnishing an opportunity for the officers to meet for purposes of social intercourse.

The main building and the other buildings with the exception of the Women's Prison are in excellent condition.

During the year the Cemetery Resthaven has been completed, and a granite curbing put around it, and as soon as

the spring opens it will be laid out in approved form as a complete cemetery.

The division of the prisoners into classes, according to number of sentences served, has been continued, and, while its results have not been as marked as I expected when the system was introduced, yet I feel sure that imperfect as it is, it is doing good and preventing close association of first offenders with those more hardened.

During the year the United States Government has, at my request, established Deer Island as a sub-station of the Boston Post Office, denominating it Station 47 and paying a salary of two hundred dollars per year to the clerk in charge. In order to carry on the business of the office in a proper manner I have constructed there a permanent and well-equipped post-office.

HOUSE OF CORRECTION, SOUTH BOSTON.

The institution at South Boston remains in the same excellent condition so far as discipline and cleanliness are concerned and in the same undesirable condition, with regard to the housing of the convicts, that I reported upon last year. The cells are too small, and there should be some change made in regard to this institution. Either it should be entirely removed from that location, which I very much approve, or better buildings should be erected there for the housing of the convicts.

It is my desire to make changes in the bathing facilities of both the institutions, but it seems to me unwise to make these changes here, in view of the agitation for the removal of this institution.

The calisthenic exercise has demonstrated the value of its introduction, and in no better manner can its results be judged than by a comparison of the number of cases of sickness during the past year with the sick lists of previous years when such a system was not in operation.

The school is doing excellent work, and is justifying its establishment fully. It is more necessary now than formerly on account of the many commitments of those who are ignorant of our language, either written or spoken. The work done by the instructor is excellent, and is producing of good results. His report in detail may be found appended.

BOATS.

The J. Putnam Bradlee is in excellent condition and will need only the routine repairs this spring. The John Howard

is to be given a thorough overhauling, and I shall place a new boiler in her hull at the expiration of her license in October.

The conduct of the boats has been most praiseworthy, and, notwithstanding the extra work entailed by the summer excursions upon both boats, the service rendered by them was eminently satisfactory to all concerned.

In concluding my report I wish to gratefully speak of the cordial relations existing between the head of the department and his subordinates. While it is to be expected that differences of opinion will arise regarding matters of management and discipline—and not only are they expected, but it is desirable that they should occur for the best development of any institution or department—yet I have nothing but the kindest thought and regard for all employed in the department, and I am confident that this feeling is mutually enjoyed.

While it is impossible that the Commissioner should be omniscient and all-wise, yet I cannot but trust that all in the department must feel that he has endeavored to raise the standard of the institutions and to make their service as agreeable and pleasant as is possible, and I desire to thank them for their cordial co-operation in carrying out the desires of the Department Chief.

RELEASE OF PRISONERS.

FINE CASES.

(Arranged by Courts.)

COURT.	RELEASES GRANTED.		
	Male.	Female.	Total.
Central	635	29	664
South Boston	263	11	274
Charlestown	223	7	230
East Boston	111	3	114
Roxbury	350	49	399
Dorchester	221	6	227
Brighton	21	.....	21
West Roxbury	28	1	29
Chelsea	81	11	92
Total	1,933	117	2,050

SENTENCED INMATES.

(Arranged by Courts.)

COURT.	Applications referred.	Releases recommended.	Releases not recommended.
Central	351	170	181
South Boston	131	113	18
Charlestown	24	22	2
East Boston	27	26	1
Roxbury	34	21	13
Dorchester	11	9	2
Brighton	6	6	
West Roxbury	5	4	1
Chelsea	10	10	
Superior	30	15	15
Total	629	396	233

SENTENCED INMATES.

(Arranged by Institutions.)

	Application for Pardon.	RELEASES GRANTED.			Releases Refused.
		Men.	Women.	Total.	
Suffolk County Jail.....	9	6	1	7	2
House of Correction, South Bos- ton	36	12	2	14	22
House of Correction, Deer Isl- and	584	308	67	375	209
Total.....	629	326	70	396	233

EXPENDITURES FOR THE YEAR ENDING JANUARY 31, 1899.

Office Expenses.

Salaries :

Ernest C. Marshall, Commissioner,	\$5,000 00	
Thomas F. Hunt, Assistant Commis- sioner	2,500 00	
Hubert Pope, Secretary	2,500 00	
Employees	7,970 00	
		\$17,970 00
Horse-keeping		659 38
Transportation		517 74
Food and lodgings		497 30
Telephone services		349 44
Stationery		336 70
Printing		334 20
Postage		227 69
Furniture and office expenses		191 69
Clothing, etc.		163 58
Tools, etc.		76 30
Gratuities		56 85
Advertising		2 50
Total		<u>\$21,383 37</u>

HOUSE OF CORRECTION, DEER ISLAND.

Salaries and wages :

James R. Gerrish, Master	\$2,500 00	
Employees	47,643 57	
		\$50,143 57
Food		60,721 26
Ice		20 00
Carried forward		<u>\$110,884 83</u>

<i>Brought forward</i>		\$110,884 83
Clothing		7,453 13
Bedding		1,090 30
Furniture and household supplies		4,867 57
Fuel		9,316 28
Light :		
Gas coal and lime	\$1,198 52	
Oils	210 49	
		1,409 01
Medical and surgical supplies	\$551 56	
Liquors	344 52	
		896 08
Printing		819 94
Advertising		35 61
Stationery		314 72
Postage		362 00
Religious services		20 30
Instruction and amusement :		
Entertainment of inmates	\$67 20	
Library and school supplies	199 25	
		266 45
Disinfectants		808 93
Repairs and improvements		8,908 98
Agricultural		3,551 77
Freight		58 24
Transportation		5 35
Insurance		100 00
Tobacco and snuff		58 80
Soap and laundry supplies		566 50
Telephone service		37 59
Water		2,500 00
		\$154,332 38

CREDIT.

By amount expended, account rebuilding Ward A, prior to passage of loan order and later transferred to loan	2,749 85
Total	\$151,582 53

HOUSE OF CORRECTION, DEER ISLAND.

Machinery and Materials for Manufacturing.

Stone Department :	
Salaries and wages	\$2,520 00
Stone	11,948 92
Freights	2,151 60
Tools	767 60
Advertising	52 87
	\$17,440 99
<i>Carried forward</i>	\$17,440 99

<i>Brought forward</i>		\$17,440 99
Other industries:		
Salaries and wages	\$2,547 34	
Material	38,887 79	
Freight and cartage	220 84	
Insurance	43 75	
Stationery	18 65	
Advertising	11 50	
Car-fares	8 67	
		<u>41,738 54</u>
Total		<u>\$59,179 53</u>

HOUSE OF CORRECTION, SOUTH BOSTON.

Salaries and wages:		
John C. Whiton, Master	\$2,500 00	
Employees	29,755 19	
		<u>\$32,255 19</u>
Food		29,171 73
Ice		521 16
Clothing		4,403 75
Bedding		186 98
Furniture and household supplies		1,352 32
Fuel		4,671 86
Light:		
Gas	\$107 70	
Gas coal and lime	934 67	
Oils	4 23	
		<u>1,046 60</u>
Medical and surgical supplies	\$314 90	
Liquors	21 55	
		<u>336 45</u>
Printing		65 22
Advertising		37 18
Stationery		125 99
Postage		125 00
Religious services		1,368 04
Instruction and amusement:		
Entertainment of inmates	\$152 20	
Library and school supplies	121 77	
		<u>273 97</u>
Disinfectants		260 53
Repairs and improvements		1,271 38
Agricultural		665 97
Freights		10 85
Transportation		103 36
Insurance		100 00
Burials		84 00
		<u>\$78,437 53</u>
<i>Carried forward</i>		

<i>Brought forward</i>	\$78,437 53
Tobacco and snuff	161 56
Soap and laundry supplies	460 42
Telephone service	128 00
Water	2,293 60
Gratuities	451 25
Return of escaped prisoner	10 00
Total	<u>\$81,942 36</u>

MACHINERY AND MATERIALS FOR MANUFACTURING.

Salaries	\$1,164 47
Materials	11,241 01
Total	<u>\$12,405 48</u>

STEAMER J. PUTNAM BRADLEE.

Crew	\$10,495 83
Fuel	2,235 50
Rent of Sargent's Wharf	2,000 00
Repairs	1,894 70
Use of steamer during repairs	350 00
Water rates	209 50
Chandlery and supplies	192 70
Furniture	87 90
Telephone service	82 17
Repairs of wharf	5 30
Total	<u>\$17,553 60</u>

STEAMER JOHN HOWARD.

Crew	\$3,185 33
Repairs	697 13
Chandlery and supplies	298 36
Water rates	57 00
Hire of steamer during repairs	8 33
Total	<u>\$4,246 15</u>

RECAPITULATION OF EXPENDITURES FOR YEAR 1898-99.

House of Correction, Deer Island (Institution)	\$151,582 53
House of Correction, Deer Island (Industries)	*59,179 53
House of Correction, South Boston (Institution)	81,942 36
House of Correction, South Boston (Industries)	*12,405 48
Office expenses	21,383 37
Steamer J. Putnam Bradlee	17,553 60
Steamer John Howard	4,246 15
Total expenditures	<u>\$348,293 02</u>

* New items of expense.

STATEMENT OF ACCOUNTS RENDERED ON ACCOUNT OF INCOME OF
DEPARTMENT YEAR ENDING JANUARY 31, 1899.

House of Correction, Deer Island (Institution) .	\$6,355 35
House of Correction, Deer Island (Industries) .	71,720 07
House of Correction, South Boston (Institution) .	1,708 92
House of Correction, South Boston (Industries) .	14,493 19
Steamer J. Putnam Bradlee	162 50
Total	<u>\$94,440 03</u>

THE SOURCES FROM WHICH THESE ACCOUNTS HAVE BEEN DERIVED.

House of Correction, Deer Island (Institution).

Sale of —	\$353 30
Barrels	1,682 81
Board of patients	212 10
Bones	11 45
Bread	154 80
Cell buckets	3 15
Cloth	2 30
Clothing samples	38 06
Coal	46 00
Coffins	92 03
Grease	78 37
Hay	14 00
Horse board	14 82
Ice	714 77
Labor of inmates	1,340 10
Laundry work	6 30
Lumber	77 69
Milk	60 03
Old metal	3 86
Old rope	16 61
Paint stock	457 25
Pigs	80 75
Rags	2 00
Shoeing horse	10 50
Sugar	882 30
Vegetables	
	<u>\$6,355 35</u>

House of Correction, Deer Island (Industries).

Cane shop	\$1,332 99
Clothing department	40,699 39
Printing department	684 69
Shoe department	546 75
Stone yard	28,456 25
Total	<u>\$71,720 07</u>

House of Correction, South Boston (Regular).

Sale of —

Barrels	\$165 69
Bones	185 43
Coal tar	19 50
Clothing samples	4 61
Grease	188 10
Laundry work	857 32
Pork	266 89
Rags	21 38

Total	<u>\$1,708 92</u>
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House of Correction, South Boston (Industries).

Sale of —

Brooms	\$552 22
Clothing	13,940 97

Total	<u>\$14,493 19</u>
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Steamer J. Putnam Bradlee.

Transportation of merchandise	<u>\$162 50</u>
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Comparison of expenditures for years ending January 31, 1898, and January 31, 1899:

	EXPENDITURES FOR TWELVE MONTHS.		Increase.	Decrease.
	Ending Jan. 31, 1898.	Ending Jan. 31, 1899.		
House of Correction, D. I. Institution	\$184,735 66	\$151,582 53	.....	\$33,153 13 ¹
House of Correction, D. I. Industries.....		59,179 53	\$59,179 53	
House of Correction, So. Boston Institution.	81,256 34	81,942 36	686 02	
House of Correction, So. Boston Industries.		12,405 48	12,405 48	
Office expenses.....	20,607 91	21,383 37	775 46	
Steamer J. Putnam Bradlee.....	16,898 33	17,553 60	655 27	
Steamer John Howard...	4,723 85	4,246 15	.....	477 70
Total	\$308,222 09	\$348,293 02	\$73,701 76	\$33,630 83

¹ Decrease caused by separation of industries from institution account.

Increase as above	\$73,701 76
Decrease as above	33,630 83
Net increase	<u>\$40,070 93</u>

This increase almost wholly accounted for by change in the laws relating to prison labor.

Comparison of accounts rendered on account of income for years ending January 31, 1898 and 1899:

	ACCOUNTS RENDERED FOR YEAR.		Increase.	Decrease.
	Ending Jan. 31, 1898.	Ending Jan. 31, 1899.		
House of Correction, Deer Island	\$43,032 59	\$78,075 42	\$35,042 83	
House of Correction, South Boston.....	16,320 48	16,202 11	.....	\$118 37
Steamer J. Putnam Bradlee.....		162 50	162 50	
Total.....	\$59,353 07	\$94,440 03	\$35,205 33	\$118 37

NOTE. — Net increase, \$35,086.96.

Actual cost of conducting the institutions for year ending January 31, 1899:

	Expended.	Actual income.	Actual cost.
House of Correction, Deer Island Institution .....\$151,582 53	\$210,762 06	\$64,615 77	\$146,146 29
House of Correction, Deer Island Industries..... 59,179 53			
House of Correction, South Boston Institution 81,942 36	94,347 84	16,373 77	77,974 07
House of Correction, South Boston Industries..... 12,405 48			
Office expenses	21,383 37	.....	21,383 37
Steamer J. Putnam Bradlee	17,553 60	125 00	17,428 60
Steamer John Howard.....	4,246 15	.....	4,246 15
Total	\$348,293 02	\$81,114 54	\$267,178 48

Average number of inmates for year ending January 31, 1898, and January 31, 1899:

	1898.	1899.	Increase.	Decrease.
House of Correction, Deer Island	1,728	1,569	.....	159
House of Correction, South Boston....	526	537	11	
Total	2,254	2,106	11	159

Average expenditure for actual cost of each inmate for year ending January 31, 1899:

	EXPENDITURES.		ACTUAL COST.	
	Per Year.	Per Week.	Per Year.	Per Week.
House of Correction, Deer Island.....	\$134 33	\$2 58	\$98 15	\$1 79
House of Correction, South Boston ...	175 69	3 38	145 20	2 79

Respectfully submitted,

ERNEST C. MARSHALL,

Commissioner.

APPENDIX.

February 1, 1899.

E. C. MARSHALL, ESQ.,

Penal Institutions Commissioner of the City of Boston :

DEAR SIR, — The annual report of the Agent for Discharged Female Prisoners of this department, for the year ending February 1, 1899, is respectfully submitted :

In this noble work my aim is to instil into the minds of the unfortunate women a desire for a better and more useful life.

I visit Deer Island weekly, and have special conferences with any female inmate who wishes to talk with me regarding herself or her family. In most cases I have employment secured for them when they leave Deer Island, but many who promise to take positions refuse to accept them after receiving their liberty.

Fourteen hundred and forty-two women have been advised and assisted during the last year. Employment has been found by me for seventy-three women. I give no employment fees to applicants, but accompany each individual to the employment office and pay for them when they are provided with work. In many cases I have obtained positions without payment of any fee.

Most of the women, whom I have placed in positions, correspond with me, and letters are often received from the parties by whom they are employed, expressing satisfaction with their services ; so that I feel encouraged and feel that they appreciate what has been done for them and are trying to do the best they can.

Many and varied are the experiences of these poor unfortunates who are willing and make good resolutions, but are too weak to sustain them.

I received a letter from a lady in Hanover, Conn., where I placed one of the women who has been at Deer Island many times, stating she was one of the most desirable servants she has ever had ; and like expressions are received from a number of the ladies by whom these unfortunate women are employed.

Through your kindness in allowing me the privilege to redeem their furniture which has been in storage, and giving them means to re-establish their homes, much good has come as in many cases great financial loss to them has been averted, and homes re-established in which reformatory influences could work for good.

Acting under your suggestions, I have been able to secure forty-one pardons, all of which have been deserving cases, and most of these women report to me once in two weeks until their sentence terminates.

I have placed a girl, who had been in evil courses for two years, in her home in Buffalo, N. Y., whose father and mother have both written me telling me what comfort and happiness I have brought to that home. I also placed two girls in the Lying-in Hospital, two in the House of Good Shepherd, and have sent several women to other cities and States.

I desire to mention the courteous treatment shown me by the agents of the different railroad stations, who have forwarded the trunks and parcels belonging to these women free of charge.

Feeling that the pawn system has been abused, by careful management I have reduced the amount spent in former years to about one-third of what it formerly has been. During the last year, I have redeemed thirty-four articles of clothing out of pawnshops.

The following number have been assisted in various ways during the year ending January 31, 1899:

Number advised and assisted in various ways . . .	1,442
Number furnished conveyance to friends or to employment in this or other States	1,133
Number furnished meals	891
Number furnished clothing	89
Number sent to temporary homes	85
Number furnished gratuities	119
Number for whom pawns were paid	34
Number interviewed at boat	1,271
Number for whom pardons have been obtained . . .	41
Number of storage charges paid	24
Number for whom employment has been obtained . .	90
Number of express charges paid	24
Number for whom furniture has been restored free of charge	4
Number sent to Lying-in Hospital	2
Number sent to House of Good Shepherd	3

The following are the expenditures for the year ending January 31, 1899:

Amount paid for car-fares	\$170 17
Amount paid for meals	133 95
Amount paid for gratuities	49 15
Amount paid for clothing	52 42
Amount paid for employment fees	12 50
Amount paid for pawns	22 11
Amount paid for expressing	5 40
Amount paid for storage	5 75

Total	\$451 45
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Respectfully submitted,

KATHERINE BERRAN, *Agent.*

BOSTON, MASS., February 1, 1899.

E. C. MARSHALL, ESQ.,

Commissioner, Penal Institutions, Boston, Mass.:

DEAR SIR,—I respectfully submit herewith my annual report as Agent for Discharged Prisoners, for the term from February 1, 1898, to February 1, 1899.

In the course of the past twelve months I have visited each of the institutions once a week and during the above period have interviewed about 3,000 prisoners. In the course of such interviews I have found quite a large percentage of them to be residents of outlying districts, who had spent their money and were arrested for drunkenness and other crimes, here in the city, and on the expiration of their sentences they were without friends or any material resources, and in such cases I have written numerous letters to clergymen in their respective homes. While not receiving many replies to such letters I have been able to place most of them in positions where they could earn an honest living and they thus became self-supporting and law-abiding citizens, as far as my observation went.

I am pleased to inform you that during the past year I have met with much kindness and encouragement from many of the prominent and reputable business firms in Boston. The firms I called upon and asked for employment have invariably done all in their power to aid me in giving employment to the discharged prisoners whom I have recommended to them, and I am also pleased to inform you that prisoners so placed by me have worked faithfully, and proven themselves worthy of aid and encouragement.

In relation to transportation furnished discharged prisoners I beg to say I have found on interviewing some of the

prisoners that quite a large number of them belong in different cities and towns of the Commonwealth and some of them belong in other States and foreign countries.

Most of the prisoners upon their release find themselves with no money to reach their respective homes, and in all such cases I have seen that they were safely started for home, supplying them with the necessary tickets, etc. These tickets I have always given to the conductors, thereby preventing any misuse of tickets or imposition on our kindness. For the prisoners so sent home I can say that 90 per cent. of them trouble us no more. This statement of course I base upon my observations of the past twelve months.

In regard to supplying tools, etc., I would further say that quite a number of the prisoners have made personal application to me for tools in order that they might resume their former occupations and trades and thereby again become self-supporting and respectable members of the community. I have found upon careful investigation that most of the prisoners were fully worthy of aid and encouragement to secure these tools and they have been furnished with them, and the results of such aid to mechanics and artisans who were discharged from our institutions have been entirely satisfactory and fully warranted such aid as has been given them.

With regard to supplying board and lodgings for a few days to discharged prisoners for a short time after their release, I would say that I have never refused to supply such accommodations when asked of me by a discharged prisoner, and in a great number of such cases, in the space of three or four days, the prisoners found employment or had returned to their friends and thereby ceased to be in any way a burden on our charity. I have in this way assisted in the neighborhood of 491 men with 2,240 meals and 895 lodgings.

PETITIONS FOR PARDONS.

Referring to this part of my work I would report that in going through the institutions and in a course of observations and interviews with quite a number of the prisoners, I found many of them fathers of large families and in such cases, where the offence was of a simple case of drunkenness, etc., I have never hesitated where it was the prisoners first commitment to the institution to recommend them to your notice for pardon. I invariably, all other things considered, gave my recommendation for pardon after a certain term of the sentence had been served, believing that the prisoner was

disposed to change his mode of life and gave every promise of reformation, and had signed the temperance pledge, and feeling that the manhood in the prisoner would rise and assert itself; and I am glad to say to the credit of human nature that in 80 per cent. of such cases of such pardons the majority of prisoners have done all they promised.

I have, in connection with my duties the past year, succeeded in recovering for the benefit of sundry prisoners, back pay (due them previous to their arrest and incarceration), clothing, jewelry, etc., left at various places and in pawn, to the value of \$250 to \$300.

In concluding this my first annual report as Agent for Discharged Prisoners, I am pleased to say, in speaking to Mr. Keefe, the Chief Probation Officer of the Central Court, that he informs me that 60 per cent. of the cases we have had from his court have not returned, and I am of the impression that this number is too small and that we can safely claim 80 per cent. from the courts of the county; and these figures show the extent of our reform work among those who have been former inmates of our institutions.

In the future as I become more familiar with the work and as my knowledge and acquaintance of the people will increase year by year, any of them showing contrition and signs of reformation will be aided in gaining the right path and made law-abiding citizens of the communities where they belong.

The amount expended from February 1, 1898, to February 1, 1899, in connection with my office as Agent for Discharged Prisoners, is as follows:

Board and lodging (men and women)	.	.	.	.	.	\$357	30
Transportation	.	.	.	.	.	264	29
Tools, etc.	.	.	.	.	.	105	78
Clothing	.	.	.	.	.	31	80
Gratuities	.	.	.	.	.	12	00
							\$771 17

Your aid and advice in all of my duties as Agent for Discharged Prisoners has been to me of the greatest benefit in

discharge of the duties of my position, and again thanking you for the same, I respectfully beg to submit this report for your consideration.

Yours respectfully,

JAMES F. ENGLISH,

Agent for Discharged Prisoners.

NOTE. — Accompanying this report were schedules giving the names of those assisted in various directions and other information, which for obvious reasons have been omitted. The following summary, however, is given:

Schedule "A."	Employment procured for 116 discharged prisoners.
" "B."	Transportation furnished to 79 discharged prisoners.
" "C."	Clothing, tools, etc., furnished to 96 discharged prisoners.
" "D."	Pardons obtained for 166 prisoners.

OFFICE OF HOUSE OF CORRECTION, DEER ISLAND.

BOSTON HARBOR, January 31, 1899.

ERNEST C. MARSHALL, ESQ.,

Penal Institutions Commissioner, Boston, Mass.:

DEAR SIR,—I herewith submit my annual report for the year ending January 31, 1899.

There have been no changes in the general management of the institution. We have been running comparatively smoothly the past year. Some improvements have been made about the grounds, but none other than general repairs in the buildings. I would recommend more electric lights, a new prison for the women, and new wharves at both the steamboat landing and Shirley Gut. The storm of last December carried away most of the piling and all of the wharf at the last-named place. It also ruined the government wall extending around the island. There should be a stone embankment wall built from the old piggery, or straw-shed, to the boat-house at Shirley Gut. The government should expend some money in that direction before the beach extends itself to the new cell-house.

The farm stock is in good condition, though the crops have not been as abundant as in past seasons. We have raised the following:

Apples	75 bbls. . . .	\$2 50	\$187 50
Asparagus	2,700 bunches	08	196 00
Beans, bush. . . .	100 bush. . . .	45	45 00
“ lima	20 “	65	13 00
Beets, mangle	185 tons	12 00	2,220 00
“ table	510 bush. . . .	40	204 00
Blackberries	35 qts. . . .	05	1 75
Cabbages	11,600 heads	02	232 00
Carrots	417 bush. . . .	30	125 10
Cauliflower	50 heads	08	4 00
Celery	6,321 bunches	08	505 68
Chickens	175 lbs. . . .	15	26 25
Corn, ensilage	200 tons	4 00	800 00
Cucumbers	212 bush. . . .	90	190 80
Currants	97 qts. . . .	05	4 85
Ducks	110 lbs. . . .	10	11 00
Eggs	900 doz. . . .	20	180 00
Grapes	4 bush. . . .	75	3 00
Greens, beet	168 bush. . . .	20	33 60
“ cabbage	310 bush. . . .	10	31 00

Carried forward,

\$5,014 53

<i>Brought forward,</i>				\$5,014 53
Greens, dandelion .	300 bush. .	10	30	00
“ spinach .	500 “ .	15	75	00
Hay . . .	130 tons .	12 00	1,560	00
Ice . . .	1,200 tons .	2 50	3,000	00
Lettuce . . .	4,000 heads .	01	40	00
Manure . . .	1,510 cords .	2 00	3,020	00
Melons . . .	18 bush. .	75	13	50
Milk . . .	111,627 qts. .	05	5,581	35
Oat fodder . . .	60 tons .	10 00	600	00
Onions . . .	2,006 bush. .	70	1,404	20
Parsley . . .	495 bunches .	01	4	95
Parsnips . . .	510 bush. .	30	153	00
Pears . . .	25 “ .	75	18	75
Peas . . .	126 “ .	75	94	50
Peppers . . .	5 “ .	80	4	00
Potatoes . . .	205 “ .	90	184	50
Pumpkins . . .	8 tons .	25 00	200	00
Radishes . . .	500 bunches .	01	5	00
Raspberries . . .	67 qts. .	05	3	35
Salsify . . .	15 bush. .	40	6	00
Squash . . .	23 tons .	20 00	460	00
Strawberries . . .	497 qts. .	05	24	85
Tomatoes . . .	627 bush. .	40	250	80
Turkeys . . .	19 head .	1 25	23	75
Turnips {Purple top	1,200 bush. .	25	300	00
“ {Sweet				
“ {White egg				
Wood . . .	297 cords .	2 00	594	00
				<u>\$22,666 03</u>

The following figures show the expenses and income of the piggery:

Pork slaughtered, 87,334 lbs. @ 7	
cents	\$6,113 38
Sale of live pigs	477 25
Sale of soap grease	101 11
475 cords manure @ \$2.50	1,187 50
798 hogsheads soft soap @ \$5.00	3,990 00
	<u>\$11,869 24</u>
Cost of soap stock	49 87
	<u>\$11,819 37</u>

The fines of 1,415 prisoners were paid during the year, the amount received thereby being \$9,995.54. This money is not a part of the income of the institution.

There have been made for the use of the institution 1,499 pairs men's brogans, 492 pairs women's shoes, 720 pairs women's slippers, 527 chemises, 607 pairs drawers, 728 skirts,

200 napkins, 935 dresses, 603 aprons, 327 tires, 219 head handkerchiefs, 86 night dresses, 1,234 towels, 690 roller towels, 30 tablecloths, 10 curtains, 693 sheets, 260 pillow slips, 16 bed ticks, 60 pillow ticks, 62 stand covers, 50 machine covers, 42 coffee bags, 54 bakers' caps, 1,025 institution coats, 885 institution vests, 1,617 pairs institution pants, 2,228 pairs liberty pants, 652 liberty coats, 524 liberty vests, 110 dozen woollen shirts, 119 dozen cotton shirts, 179 dozen pairs overalls, 2 dozen bakers' mittens; for the Boston Almshouse and Hospital, Long Island, 120 coats, 120 vests, 237 pairs pants; for the Charlestown Almshouse, 20 coats, 20 vests, and 56 pairs pants.

The stone department has cut during the year 5 square catch-basins, 75 gutter-stones, 134 large curb-corners, 281 small curb-corners, 279 gutter-mouths, 46,528 feet of edge-stone, 816 feet straight coping, 43 feet circle coping, 80 feet of stone for steps at Resthaven, 1 step, 6 sills, 1 leveller, and 1 post.

My deputy and officers have my thanks for the faithful performance of their duties.

The reports of the Chaplain and Resident Physician, together with the usual statistics, are annexed.

Thanking you and Commissioner Hunt for attentions shown and courtesies received, I am,

Very respectfully,

JAMES R. GERRISH,

Master.

VALUE OF LAND AND BUILDINGS AT HOUSE OF CORRECTION,
DEER ISLAND.

Land.

5,837,040 feet upland at 5 cents . . .	\$291,852
2,178,000 " flats for . . .	1,000
10,000 " solid wharf at \$1.00 . . .	10,000
16,900 " pile oak at \$1.00 . . .	16,900
3,600 " pile spruce at 50 cents . . .	1,800

Value of land \$321,552

Buildings.

New prison	\$100,000
House of Correction, including gas works and boiler-house	300,000
Women's department	35,000
Laundry	15,000
Bakery (brick)	13,000
Bakery (addition)	1,500
Coal sheds	12,000

Carried forward \$476,500 \$321,552

<i>Brought forward</i>	\$476,500	\$321,552
Receiving-house	12,000	
Mechanics' shop	11,000	
Engineers' house	8,000	
Vegetable shed (wood)	7,000	
Farmers' house (brick)	6,500	
School building	7,000	
Barn (wood)	5,000	
Straw shed and hennery	1,000	
Cow barn	1,000	
Boat-house and wharf	800	
Ferry-house	700	
Ice-house	2,000	
Stone-shed	800	
New piggery	12,000	
Hospital	50,000	
Blacksmith shop	500	
Pumping-station	5,000	
Dynamo and building	15,000	
		621,800
Total value		<u>\$943,352</u>

INVENTORY OF STOCK ON HAND AT HOUSE OF CORRECTION,
DEER ISLAND, FEBRUARY 1, 1899.

Agricultural Department	\$16,771 12
Bakery	340 15
Cane shop	62 50
Carpenter shop	708 55
Clothing, female	1,237 45
" " hospital	167 20
" male	4,424 69
Engineers' department	1,146 15
General care inmates	16,420 95
" " officers	4,946 64
Hospital dispensary	768 70
" inmates	1,841 62
" officers	1,182 60
Laundry department	180 92
Library	1,320 60
Miscellaneous	1,198 24
Paint shop	638 36
Printing department	232 75
Sewing room, female	1,311 55
" " male	3,646 05
Shoe department	1,508 20
Stone department	5,331 61
Store	2,838 09
Subsistence, subsidiary	3,833 50
	<u>\$72,058 19</u>

STATISTICAL TABLES.

TABLE NO. 1.

Showing Population for Year ending January 31, 1899.

	Males.	Females.	Total.
Remaining January 31, 1898.....	1,295	388	1,683
Committed during the year.....	8,487	1,309	9,796
	9,782	1,697	11,479
Discharged during the year.....	8,805	1,367	10,172
Remaining January 31, 1899.....	977	330	1,307
Children of sentenced mothers:			
Remaining January 31, 1898			11
Admitted			33
			44
Discharged			39
			5
Remaining January 31, 1899			
During the year 2 children died.			

TABLE NO. 2.

Showing Number of Prisoners Received each Month.

	Males.	Females.	Total.
Remaining January 31, 1898.....	1,295	388	1,683
Received in February.....	577	72	649
“ “ March.....	822	108	930
“ “ April.....	669	98	767
“ “ May.....	806	102	908
“ “ June.....	796	136	932
Carried forward.....	4,965	904	5,869

TABLE NO. 2.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	4,965	904	5,869
Received in July	693	119	812
“ “ August.....	799	131	930
“ “ September.....	705	117	822
“ “ October.....	805	144	949
“ “ November.....	678	102	780
“ “ December	638	90	728
“ “ January, 1899.....	499	90	589
Total	9,782	1,697	11,479
Discharged during the year.....	8,805	1,367	10,172
Remaining January 31, 1899.....	977	330	1,307

TABLE NO. 3.

Showing Number Discharged each Month.

	Males.	Females.	Total.
Discharged during February.....	624	124	748
“ “ March.....	721	108	829
“ “ April.....	817	106	923
“ “ May.....	746	86	832
“ “ June.....	774	112	886
“ “ July.....	743	127	870
“ “ August.....	811	118	929
“ “ September.....	803	134	937
“ “ October	690	110	800
“ “ November.....	713	110	823
“ “ December	747	119	866
“ “ January, 1899.....	616	113	729
Total	8,805	1,367	10,172

TABLE NO. 4.

Daily Average.

	Males.	Females.	Total.
February.....	1,279	368	1,647
March	1,278	339	1,617
April	1,284	339	1,623
May	1,270	338	1,608
June.....	1,284	360	1,644
July.....	1,223	357	1,580
August	1,208	368	1,576
September	1,180	354	1,534
October.....	1,163	366	1,529
November	1,195	388	1,583
December.....	1,131	376	1,507
January, 1899.....	1,031	344	1,375
Maximum population.....	1,313	384	1,697
Minimum population.....	962	333	1,295
Daily average for year.....	1,211	358	1,569

TABLE NO. 5.

Showing how Discharged.

	Males.	Females.	Total.
Expired sentence.....	5,249	1,112	6,361
Pardoned	2,183	178	2,361
Fine paid.....	1,348	67	1,415
Died.....	13	8	21
Bailed	4	.....	4
By order of Court.....	2	1	3
Transferred to House of Correction, South Boston	2	1	3
Transferred to Massachusetts Reform- atory, Concord.....	2	.....	2
Transferred to Bridgewater State Farm,	2	.....	2
Total	8,805	1,367	10,172

TABLE NO. 6.

Showing Number of Times Committed for all Offences.

	Males.	Females.	Total.
First	3,690	482	4,172
Second	1,196	210	1,406
Third.....	707	125	832
Fourth	492	94	586
Fifth	382	67	449
Sixth	305	53	358
Seventh.....	247	34	281
Eighth	165	21	186
Ninth	145	16	161
Tenth	140	22	162
Eleventh.....	119	13	132
Twelfth	95	15	110
Thirteenth.....	75	12	87
Fourteenth	68	16	84
Fifteenth	67	10	77
Sixteenth.....	56	8	64
Seventeenth	63	13	76
Eighteenth	54	12	66
Nineteenth	32	11	43
Twentieth	42	6	48
Twenty-first	25	6	31
Twenty-second.....	26	1	27
Twenty-third	19	7	26
Twenty-fourth.....	16	4	20
Twenty-fifth	20	2	22
Twenty-sixth	21	3	24
Twenty-seventh.....	7	.....	7
<i>Carried forward</i>	8,274	1,263	9,537

TABLE NO. 6.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	8,274	1,263	9,537
Twenty-eighth.....	9	4	13
Twenty-ninth.....	16	3	19
Thirtieth.....	9	2	11
Thirty-first.....	17	3	20
Thirty-second.....	11	4	15
Thirty-third.....	17	4	21
Thirty-fourth.....	16	1	17
Thirty-fifth.....	11	2	13
Thirty-sixth.....	11	2	13
Thirty-seventh.....	5	.....	5
Thirty-eighth.....	4	2	6
Thirty-ninth.....	7	3	10
Fortieth.....	4	2	6
Forty-first.....	9	.....	9
Forty-second.....	5	.....	5
Forty-third.....	6	1	7
Forty-fourth.....	8	.....	8
Forty-fifth.....	3	3	6
Forty-sixth.....	2	3	5
Forty-seventh.....	1	1	2
Forty-eighth.....	2	.....	2
Forty-ninth.....	4	.....	4
Fiftieth.....	2	.....	2
Fifty-first.....	4	.....	4
Fifty-second.....	1	.....	1
Fifty-third.....	1	1	2
<i>Carried forward</i>	8,459	1,304	9,763

TABLE NO. 6.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	8,459	1,304	9,763
Fifty-fourth	1	1	2
Sixty-second	2	.....	2
Sixty-fourth	1	.....	1
Sixty-seventh	3	.....	3
Sixty-eighth	1	.....	1
Sixty-ninth	2	.....	2
Seventieth	1	1	2
Seventy-second.....	3	.....	3
Seventy-fourth.....	2	.....	2
Seventy-fifth.....	2	.....	2
Seventy-sixth	5	.....	5
Seventy-ninth.....	.....	1	1
Eightieth.....	3	1	4
Eighty-first .....	.....	1	1
Ninety-fifth.....	1	.....	1
Ninety-sixth	1	.....	1
Total	8,487	1,309	9,796

TABLE NO. 6A.

Showing Number of Times Committed for Drunkenness.

	Males.	Females.	Total.
First	2,754	284	3,038
Second	944	170	1,114
Third.....	590	102	692
Fourth	402	78	480
<i>Carried forward</i>	4,690	634	5,324

TABLE NO. 6 A.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	4,690	634	5,324
Fifth.....	334	49	383
Sixth.....	253	44	297
Seventh.....	214	32	246
Eighth.....	141	19	160
Ninth.....	122	14	136
Tenth.....	120	18	138
Eleventh.....	99	11	110
Twelfth.....	81	13	94
Thirteenth.....	67	11	78
Fourteenth.....	62	13	75
Fifteenth.....	61	10	71
Sixteenth.....	48	7	55
Seventeenth.....	53	12	65
Eighteenth.....	42	11	53
Nineteenth.....	28	10	38
Twentieth.....	35	6	41
Twenty-first.....	24	5	29
Twenty-second.....	22	1	23
Twenty-third.....	18	6	24
Twenty-fourth.....	14	4	18
Twenty-fifth.....	18	2	20
Twenty-sixth.....	18	3	21
Twenty-seventh.....	7	.....	7
Twenty-eighth.....	8	4	12
Twenty-ninth.....	16	3	19
Thirtieth.....	8	2	10
<i>Carried forward</i>	6,603	944	7,547

TABLE NO. 6A.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	6,603	944	7,547
Thirty-first.....	15	3	18
Thirty-second.....	10	3	13
Thirty-third.....	14	4	18
Thirty-fourth	13	1	14
Thirty-fifth	10	2	12
Thirty-sixth	11	2	13
Thirty-seventh.....	3	.....	3
Thirty-eighth	4	2	6
Thirty-ninth	7	3	10
Fortieth	2	2	4
Forty-first	8	.....	8
Forty-second.....	4	.....	4
Forty-third	5	1	6
Forty-fourth.....	7	.....	7
Forty-fifth.....	3	3	6
Forty-sixth... ..	2	3	5
Forty-seventh.....	.....	1	1
Forty-eighth.....	2	.....	2
Forty-ninth	2	.....	2
Fiftieth	2	.....	2
Fifty-first.....	4	.....	4
Fifty-second.....	1	.....	1
Fifty-third.....	1	1	2
Fifty-fourth.....	1	1	2
Sixty-second.....	1	.....	1
Sixty-fourth.....	1	.....	1
<i>Carried forward</i>	6,736	976	7,712

TABLE NO. 6A.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	6,736	976	7,712
Sixty-seventh	3	.....	3
Sixty-eighth.....	1	.....	1
Sixty-ninth.....	2	.....	2
Seventieth	1	1	2
Seventy-second.....	3	.....	3
Seventy-fourth	2	.....	2
Seventy-fifth.....	2	.....	2
Seventy-sixth	5	.....	5
Seventy-ninth .....	.....	1	1
Eightieth	3	1	4
Eighty-first .....	.....	1	1
Ninety-fifth	1	.....	1
Ninety-sixth	1	.....	1
Total	6,760	980	7,740

TABLE No. 6B.

Showing Number of Times Committed as Common Drunkards.

	Males.	Females.	Total.
First	1	.....	1
Second	1	.....	1
Third .....	.....	1	1
Eighth .....	.....	1	1
Total	2	2	4

TABLE No. 6C.

Showing Number of Times Committed for Vagrancy.

	Males.	Females.	Total.
First	124	12	136
Second	36	3	39
Third	20	3	23
Fourth	18	2	20
Fifth	8	2	10
Sixth.....	8	1	9
Seventh	5	.....	5
Eighth	4	2	6
Ninth	6	1	7
Tenth	4	1	5
Eleventh	5	.....	5
Twelfth	4	.....	4
Thirteenth.....	1	.....	1
Fourteenth	3	.....	3
Fifteenth	1	.....	1
Twenty-second .....	.....	1	1
Twenty-fourth	1	.....	1
Thirty-third	1	.....	1
Thirty-fourth.....	1	.....	1
Thirty-seventh.....	.....	1	1
Forty-eighth.....	.....	1	1
Sixty-second.....	1	.....	1
Total.....	251	30	281

TABLE No. 7.

Showing from what Courts Committed.

	Males.	Females.	Total.
Municipal Court (Central).....	3,534	863	4,397
Roxbury District Court	1,235	143	1,378
South Boston District Court.....	1,174	152	1,326
Charlestown District Court.....	806	22	828
Dorchester District Court	739	19	758
East Boston District Court	350	26	376
Superior Court (Criminal).....	205	50	255
Chelsea District Court.....	211	22	233
Brighton District Court.....	122	8	130
West Roxbury District Court.....	111	4	115
Total.....	8,487	1,309	9,796

TABLE NO. 8.

Offences for which Committed.

	Males.	Females.	Total.
AGAINST PERSON.			
Assault.....	6	.....	6
Assault and battery	434	28	462
Assault and battery on an officer.....	1	.....	1
Assault and battery with a dangerous weapon.....	4	.....	4
Attempt at larceny from the person...	1	1	2
Indecent assault	3	.....	3
Robbery.....	2	.....	2
Threats.....	2	.....	2
Total	453	29	482

TABLE NO. 8.—*Continued.*

	Males.	Females.	Total.
AGAINST PROPERTY.			
Attempt at larceny.....	1	.....	1
Breaking and entering	3	.....	3
Breaking glass	24	3	27
Concealing mortgaged property.....	1	.....	1
Embezzlement	13	.....	13
False pretences	4	1	5
Fraudulent conveyance of property ...	4	.....	4
Fraudulently obtaining entertainment at an inn.....	1	.....	1
Larceny	486	64	550
Larceny from the person	7	3	10
Larceny from the realty.....	1	.....	1
Larceny in a building	1	.....	1
Malicious injury to personal property,	4	.....	4
Malicious injury to real estate.....	4	.....	4
Obtaining money by false pretences...	3	.....	3
Obtaining property by false pretences,	2	.....	2
Receiving stolen goods	4	.....	4
Trespass.....	100	1	101
Unlawful appropriation	3	.....	3
Unlawfully concealing property	1	.....	1
Total.....	667	72	739
AGAINST PUBLIC ORDER.			
Allowing a horse to wander at large ..	1	.....	1
Assuming to be an officer.....	2	.....	2
Being present at a game on the Lord's Day	1	1	2
<i>Carried forward</i>	4	1	5

TABLE NO. 8.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	4	1	5
Common beggar	1	.....	1
Common drunkard	2	2	4
Common nightwalker .....	.....	56	56
Common railer and brawler .....	.....	6	6
Cruelty to animals	6	.....	6
Disturbance in a public conveyance...	3	.....	3
Disturbing the peace	25	11	36
Drunkenness	6,760	980	7,740
<i>Total</i>	6,801	1,056	7,857
Escaping from the House of Correction.....	1	.....	1
Falsely representing age and residence when applying for a marriage license .....	.....	1	1
Forgery	1	.....	1
Fornication	43	41	84
Gaming on the Lord's day	8	.....	8
Having a dangerous weapon.....	2	.....	2
Idle and disorderly	81	62	143
Indecent exposure	8	.....	8
Keeping a disorderly house	2	10	12
Keeping an unlicensed dog	3	.....	3
Lewdness	1	1	2
Lewd and lascivious person	1	.....	1
Loitering in a railroad station	3	.....	3
Lying in grass on Common	2	.....	2
Making a false alarm of fire	1	.....	1
<i>Carried forward</i>	6,958	1,171	8,129

TABLE NO. 8.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	6,958	1,171	8,129
Non-support.....	31	.....	31
Obscenity.....	1	1	2
Obstructing railroad car.....	1	.....	1
Obstructing sidewalk.....	11	.....	11
Obstructing street travel.....	2	.....	2
Pedling without a license.....	25	.....	25
Permitting a minor to beg.....	.....	1	1
Profanity.....	10	2	12
Refusing to assist an officer.....	1	.....	1
Selling junk without a license.....	1	.....	1
Stealing a ride.....	4	.....	4
Stubborn child.....	1	.....	1
Throwing snowballs in street.....	2	.....	2
Tramp.....	5	.....	5
Unlawfully keeping and exposing for sale intoxicating liquors.....	4	3	7
Unlawfully riding a bicycle on a side- walk.....	3	.....	3
Unlawfully standing a team.....	1	.....	1
Vagabond.....	1	.....	1
Vagrant.....	251	30	281
Violating City Ordinance.....	11	.....	11
Violating park rules.....	1	.....	1
Walking on railroad track.....	42	.....	42
Total.....	7,867	1,208	8,575

TABLE NO. 9.

Showing Sentences of those Committed.

	Males.	Females.	Total.
Non-payment of fines.....	5,092	323	5,415
2 days.....	2	.....	2
3 ".....	10	2	12
5 ".....	23	3	26
8 ".....	1	.....	1
10 ".....	103	7	110
15 ".....	3	.....	3
20 ".....	1	1	2
30 ".....	23	6	29
60 ".....	7	1	8
70 ".....	4	.....	4
166 ".....	1	.....	1
281 ".....	1	.....	1
484 ".....	1	.....	1
1 month.....	355	54	409
2 months.....	615	112	727
3 ".....	928	226	1,154
4 ".....	499	215	714
5 ".....	174	55	229
6 ".....	505	233	738
7 ".....	2	.....	2
8 ".....	9	4	13
9 ".....	59	25	84
10 ".....	2	3	5
11 ".....	2	1	3
12 ".....	54	35	89
<i>Carried forward</i>	8,476	1,306	9,782

TABLE NO. 9.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	8,476	1,306	9,782
18 months.....	4	1	5
24 “	3	1	4
30 “	1	.....	1
36 “	2	1	3
48 “	1	.....	1
Total	8,487	1,309	9,796

Of the above, 3 men who had escaped were returned to serve the remainder of their sentences; 8 men and 3 women were transferred from the House of Correction, South Boston; 1 woman from the Reformatory for Women, and 1 man from the Massachusetts Reformatory; 6 men were committed under bonds for six months.

TABLE NO. 10.

Showing Ages of Prisoners when Committed.

	Males.	Females.	Total.
Under 20 years.....	189	15	204
20 to 29 years, inclusive.....	2,211	396	2,607
30 “ 39 “	2,891	478	3,369
40 “ 49 “	1,918	241	2,159
50 “ 59 “	898	124	1,022
60 “ 69 “	329	42	371
70 “ 79 “	44	11	55
80 “ 89 “	7	2	9
Total	8,487	1,309	9,796

TABLE NO. 11.

Color.

	Males.	Females.	Total.
White.....	8,308	1,252	9,560
Black.....	177	57	234
Red.....	2	.....	2
Total.....	8,487	1,309	9,796

TABLE NO. 12.

Social Relations.

	Males.	Females.	Total.
Married.....	2,515	733	3,248
Single.....	5,972	576	6,548
Total.....	8,487	1,309	9,796

TABLE NO. 13.

Education.

	Males.	Females.	Total.
Could read and write.....	7,350	924	8,274
Could read only.....	26	17	43
Could neither read nor write.....	1,111	368	1,479
Total.....	8,487	1,309	9,796

TABLE NO. 14.

Nativity.

	Males.	Females.	Total.
BORN IN UNITED STATES.			
Alabama.....	2	1	3
California.....	10	2	12
Carried forward.....	12	3	15

TABLE NO. 14.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	12	3	15
Colorado	3	.....	3
Connecticut.....	60	5	65
Delaware	2	.....	2
District of Columbia	12	5	17
Florida	3	1	4
Georgia	9	2	11
Illinois	12	1	13
Indiana.....	6	.....	6
Iowa	4	.....	4
Kansas	1	.....	1
Kentucky	7	1	8
Louisiana	4	1	5
Maine	261	31	292
Maryland.....	17	4	21
Massachusetts	3,090	374	3,464
Michigan	11	.....	11
Minnesota	3	.....	3
Missouri.....	1	.....	1
Montana.....	4	.....	4
New Hampshire	106	25	131
New Jersey.....	24	1	25
New York	220	23	243
North Carolina.....	29	6	35
Ohio	15	2	17
Pennsylvania	49	7	56
Rhode Island	60	9	69
<i>Carried forward</i>	4,025	501	4,326

TABLE NO. 14.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	4,025	501	4,326
South Carolina.....	9	1	10
Tennessee	7	.....	7
Texas	4	.....	4
Vermont	43	3	46
Virginia	49	7	56
West Virginia.....	2	.....	2
Wisconsin	6	.....	6
Total	4,145	512	4,657
OF FOREIGN BIRTH.			
Arabia	1	.....	1
Armenia.....	3	.....	3
At sea	5	2	7
Australia	1	.....	1
Austria.....	8	.....	8
Belgium	5	1	6
Bermuda.....	4	.....	4
Canada	110	19	129
Denmark	4	.....	4
England	359	69	428
Finland.....	11	.....	11
France	11	1	12
Germany	52	1	53
Greece	5	.....	5
Holland	3	.....	3
Hungary.....	1	.....	1
<i>Carried forward</i>	583	93	676

TABLE NO. 14.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	583	93	676
India	2	.....	2
Ireland	2,766	532	3,298
Italy	62	.....	62
Mexico	1	.....	1
Newfoundland	90	4	94
Norway.....	25	1	26
Poland	11	.....	11
Portugal.....	3	.....	3
Provinces.....	537	122	659
Russia.....	15	2	17
Scotland.....	129	35	164
Sweden.....	82	3	85
Switzerland.....	2	1	3
Turkey	2	.....	2
Unknown.....	3	2	5
Wales	19	1	20
West Indies.....	10	1	11
Total	4,342	797	5,139
Born in United States.....	4,145	512	4,657
Grand total.....	8,487	1,309	9,796

TABLE NO. 15.

Showing Industrial Relation.

	Males.	Females.	Total.
Actor.....	5	.....	5
Actress.....	.....	2	2
Agent.....	40	2	42
Artist.....	2	.....	2
Baker.....	114	.....	114
Barber.....	121	.....	121
Bartender.....	9	.....	9
Bell-boy.....	3	.....	3
Blacksmith.....	97	.....	97
Boiler-maker.....	15	.....	15
Bookbinder.....	16	.....	16
Book-keeper.....	10	.....	10
Bootblack.....	4	.....	4
Bottler.....	2	.....	2
Box-maker.....	3	1	4
Brakeman.....	31	.....	31
Brass-finisher.....	16	.....	16
Bricklayer.....	22	.....	22
Brick-maker.....	1	.....	1
Butcher.....	70	.....	70
Cabinet-maker.....	16	.....	16
Cap-maker.....	3	.....	3
Carder.....	4	.....	4
Carpenter.....	176	.....	176
Carpet-layer.....	1	.....	1
Carver.....	1	.....	1
<i>Carried forward.....</i>	782	5	787

TABLE NO. 15.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	782	5	787
Calker.....	6	.....	6
Chair-caner.....	5	.....	5
Cigar-maker	11	.....	11
Clerk.....	86	1	87
Coachman.....	7	.....	7
Conductor.....	1	.....	1
Confectioner	3	.....	3
Cook	98	54	152
Cooper.....	18	.....	18
Coppersmith.....	1	.....	1
Currier	73	.....	73
Cutter (clothing).....	15	.....	15
Dentist	1	.....	1
Diver.....	1	.....	1
Domestic .....	.....	527	527
Drover.....	2	.....	2
Druggist.....	7	.....	7
Dyer.....	1	.....	1
Electrician.....	14	.....	14
Electrotyper	1	.....	1
Engineer.....	36	.....	36
Engraver.....	5	.....	5
Farmer	151	.....	151
Fireman	226	.....	226
Fisherman	48	.....	48
Floor-layer.....	3	.....	3
<i>Carried forward</i>	1,602	587	2,189

TABLE NO. 15.— *Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	1,602	587	2,189
Florist.....	2	.....	2
Furniture-polisher	49	.....	49
Gardener.....	49	.....	49
Gas-fitter.....	6	.....	6
Gilder	2	.....	2
Glass-blower	2	.....	2
Glazier	8	.....	8
Granite-polisher.....	1	.....	1
Harness-maker.....	17	.....	17
Hatter	2	.....	2
Horseshoer	24	.....	24
Hostler.....	217	.....	217
Housewife .....	.....	576	576
Janitor	7	.....	7
Jeweller.....	9	.....	9
Laborer	3,516	.....	3,516
Last-maker	3	.....	3
Lather.....	37	.....	37
Laundress .....	.....	25	25
Lineman.....	12	.....	12
Lithographer	1	.....	1
Machine-operator.....	4	1	5
Machinist.....	86	.....	86
Marble-polisher.....	11	.....	11
Mason (stone).....	143	.....	143
Mattress-maker	3	.....	3
<i>Carried forward</i>	5,813	1,189	7,002

TABLE NO. 15.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	5,813	1,189	7,002
Miner	1	.....	1
Motorman.....	2	.....	2
Moulder.....	99	.....	99
Musician.....	13	.....	13
Nurse.....	3	13	16
Organ-grinder.....	1	1	2
Painter	223	.....	223
Paper-hanger	9	.....	9
Pattern-maker	1	.....	1
Paver.....	11	.....	11
Pedler	176	2	178
Photographer	8	.....	8
Plasterer.....	41	.....	41
Plumber.....	69	.....	69
Porter	26	.....	26
Postmaster	1	.....	1
Printer	113	.....	113
Pulp-maker.....	1	.....	1
Rigger.....	1	.....	1
Roofer.....	35	.....	35
Rope-maker.....	10	.....	10
Rubber-worker.....	12	.....	12
Sailmaker.....	1	.....	1
Sailor	147	.....	147
Salesman	27	.....	27
Sawyer	7	.....	7
<i>Carried forward</i>	6,851	1,205	8,056

TABLE NO. 15.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	6,851	1,205	8,056
Seamstress.....		11	11
Shoe-laster.....	13		13
Shoe-maker.....	301		301
Shoe-stitcher.....	3	1	4
Showman.....	1		1
Steamfitter	30		30
Stonecutter	60		60
Surveyor.....	1		1
Tailor.....	55		55
Tailoress.....		2	2
Teamster	874		874
Telegrapher.....	3		3
Tinsmith.....	30		30
Trunk-maker	1		1
Umbrella-repairer.....	1		1
Undertaker	1		1
Waiter.....	197		197
Waitress.....		88	88
Watch-maker	2		2
Weaver	22	2	24
Wheelwright.....	10		10
Whitewasher.....	27		27
Wire-worker	2		2
Wool-sorter.....	2		2
Total	8,487	1,309	9,796

Discharged	1,467	
Died	20	
		1,487
Remaining in Hospital February 1, 1899		104
Total		1,591
Largest number in Hospital at one time		127
Smallest " " " " "		74
Daily average		<u>98</u>

RECAPITULATION.

Number of patients in Hospital February 1, 1898 :		
Observation Hospital	2	
House of Correction	90	
		92
Admitted :		
Observation Hospital	206	
House of Correction	1,501	
		1,707
Total		<u>1,799</u>

Discharged :		
Observation Hospital	182	
House of Correction	1,467	
		1,649

Died :		
Observation Hospital	15	
House of Correction	20	
		35

Remaining in Hospital February 1, 1898 :		
Observation Hospital		11
House of Correction		104
Total		<u>1,799</u>

Largest number in Hospital at one time	135
Smallest " " " " "	83
Daily average	<u>103</u>

Deaths not reported in above tables, two prisoners' children.

DISEASES TREATED IN THE HOSPITAL OF ALL THE DEPARTMENTS.

Classified according to the Nomenclature of Diseases, as published by the Royal College of Physicians of London.

DISEASES.	In Hospital Feb. 1, 1898.	Admitted.	DISCHARGED.					In Hospital, Feb. 1, 1899.
			Well.	Improved.	Unimproved.	Died.	Total.	
A.								
Typhoid fever.....		1	1				1	
Peritonitis.....		1				1	1	
Febricula.....		38	38				38	
Intermittent fever.....		10		10			10	
Erysipelas.....		13	13				13	
Chronic malarial poisoning.....	2	44	10	35			45	1
Influenza.....		39	36				36	3
B.								
Muscular rheumatism.....		8	4	4			8	
Articular ".....	6	26	23	7			30	2
" " chronic.....	1	11		8	4		12	
Phthisis, pulmonalis.....	4	22		3	14	2	19	7
Chronic alcoholism.....		3		3			3	
Opium habit.....		2		2			2	
Scrofulosis.....		2		2			2	
Alcoholism.....	6	244	234				234	12
Delirium tremens.....		155	147			4	151	4
Marasmus.....		2				2	2	
Observation.....	2	43	35				35	10
Malingering.....		8	8				8	
General debility.....	10	74	50	19			69	15
Senility ".....	4	12			14	2	16	
DISEASES OF NERVOUS SYSTEM.								
Apoplexy.....		2				2	2	
Paresis.....		3				2	2	1
Locomotor ataxia.....	1				1		1	

DISEASES TREATED, ETC. — *Continued.*

DISEASES.	In Hospital Feb. 1, 1898.	Admitted.	DISCHARGED.					In Hospital Feb. 1, 1899.
			Well.	Improved.	Unimproved.	Died.	Total.	
Paralysis		2		1		1	2	
Hysteria		3		2			2	1
Epilepsy	2	34		33		2	35	1
“ alcohol		10		10			10	
Neuralgia		18	15	3			18	
Sciatica		5	2	3			5	
Pleurodynia	2	11	13				13	
Lumbago		9	8				8	1
Vertigo		5	5				5	
DISEASES OF THE INTELLECT.								
Insanity		36			31		31	5
Mania, acute		8			6	2	8	
Melancholia		5			5		5	
Dementia	1	4			2	2		1
“ senile		1				1	1	
False hearing		5			5		5	
Alcoholic insanity		11	8	3			11	
DISEASES OF THE CIRCULATORY SYSTEM.								
Functional disease of the heart		5		5			5	
Valvular “ “ “ “	1	13		3	5	5		1
“ “ “ “ “ mitral, ...		5		1	4		5	
“ “ “ “ “ aortic, ...		1			1		1	
DISEASES OF THE RESPIRATORY SYSTEM.								
Hemoptysis	1	15		16			16	
Bronchitis, acute	6	70	66	4			70	6
“ chronic		4		4			4	
Asthma	1	10		11			11	
Pneumonia	1	24	15			9	24	1
Pleurisy		6	4	2			6	
DISEASES OF FAUCES AND PALATE.								
Tonsillitis	3	13	15				15	1

DISEASES TREATED, ETC. — *Continued.*

DISEASES.	In Hospital Feb. 1, 1898.	Admitted.	DISCHARGED.					In Hospital Feb. 1, 1899.
			Well.	Improved.	Unimproved.	Died.	Total.	
Tonsillitis (ule.).....		4	4				4	
“ (foll.)	2	28	30				30	
Pharyngitis.....	1	9	10				10	
DISEASES OF THE DIGESTIVE SYSTEM.								
Gastritis	2	4	5				5	1
Dyspepsia		2		2			2	
Gastro-enteritis.....		9	9				9	
Dysentery		4	4				4	
Diarrhœa		44	44				44	
“ chronic	1	1		2			2	
Constipation.....		7	7				7	
Intestinal colic		11	11				11	
Cholera morbus		67	67				67	
“ “ infantum.....		4	4				4	
Jaundice, catarrh		3	3				3	
Indigestion	1	20	21				21	
Cirrhosis of liver		3			2		2	1
DISEASES OF THE URINARY SYSTEM.								
Bright's disease, acute		1	1				1	
“ “ chronic		2			2		2	
Cystitis		8	2	6			8	
DISEASES OF WOMEN.								
Metritis		2		2			2	
Endometritis		6		5			5	1
Vaginitis, specific		30	28	2			30	
Dysmenorrhœa		5		5			5	
Menorrhagia		8	8				8	
Pregnancy.....	1	6	3		4		7	
Abortion.....		3	3				3	
Amenorrhœa		2		2			2	
Metrorrhagia		4		4			4	

DISEASES TREATED, ETC. — *Continued.*

DISEASES.	In Hospital Feb. 1, 1898.	Admitted.	DISCHARGED.					In Hospital Feb. 1, 1899.
			Well.	Improved.	Unimproved.	Died.	Total.	
DISEASES OF THE CUTANEOUS SYSTEM.								
Erythema.....		2	2				2	
Psoriasis.....		2	2				2	
Uticaria.....		3	3				3	
Eczema.....		3		3			3	
Herpes circinatus.....		5	5				5	
Pediculi capitis.....		10	10				10	
“ pubis.....		38	38				38	
VENEREAL DISEASES.								
Gonorrhœa.....		50	40	18			48	2
Phimosis.....		1	1				1	
Paraphimosis.....		1	1				1	
Bubo.....	1	11	8	1			9	3
Chancre.....		3	3				3	
Chancroids.....		18	17				17	1
Orchitis.....		4	3	1			4	
Stricture of urethra (org.).....		12		12			12	
Syphilis.....	1	8		6		1	7	2
“ secondary.....	7	21		21			21	
“ tertiary.....	2	12		14			14	
Venereal warts.....		9	8				8	
INJURIES.								
Burns.....		2	2				2	
Frost bite.....		3	2				2	
Contusions.....	1	15	13				13	
“ of eye.....		4	4				4	
Incised wounds.....	1	6	7				7	
Lacerated wounds.....	1	22	23				23	
“ “ scalp.....		28	28				28	
“ “ face.....		10	10				10	
“ “ hands.....		5	5				5	

DISEASES TREATED, ETC. — *Continued.*

DISEASES.	In Hospital Feb. 1, 1898.	Admitted.	DISCHARGED.					In Hospital Feb. 1, 1899.
			Well.	Improved.	Unimproved.	Died.	Total.	
Lacerated wounds, foot		2	2				2	
Sprain of wrist		3	3				3	
“ “ ankle		16	15				15	1
Dislocation of shoulder	1	1	2				2	
Fracture of inf. maxilla		1	1				1	
“ “ clavicle		1	1				1	
“ “ humerus		2	2				2	
“ “ ulna		1	1				1	
“ “ ribs		6	6				6	
“ “ leg comp.		1						
“ “ leg		2	2				2	1
“ “ ankle	1	1	1				1	1
“ “ metacarp		1	1				1	
UNCLASSIFIED.								
Varicose veins		3			3		3	
Necrosis tibia		1						1
Hemorrhoids		20	3	16			19	1
Fistula in ano	1	1		2			2	
Abscess	4	6	8				8	2
“ perineal		1	1				1	
“ palmar		3	3				3	
“ cervical		6	6				6	
“ axillary		4	4				4	
“ labial		2	2				2	
“ alveola		20	20				20	
Varicose ulcers		4	1	3			4	
Ulcers	4	15	11	4			15	4
Hernia, inguinal	2	10			8		8	4
“ umbilical		2			2		2	
Furuncle		5	5				5	
Carbuncle		2	2				2	
Felon		5	5				5	

DISEASES TREATED, ETC. — *Concluded.*

DISEASES.	In Hospital Feb. 1, 1898.	Admitted.	DISCHARGED.					In Hospital Feb. 1, 1899.
			Well.	Improved.	Unimproved.	Died.	Total.	
Hydrocele		18	.....	18	.....	.....	18	
Cellulitis	2	18	18	.....	.....	.....	18	2
Ingrowing toe-nails		2	2	.....	.....	.....	2	
Synovitis		5	1	3	.....	.....	4	1
Epistaxis		4	4	.....	.....	.....	4	
DISEASES OF THE EYE.								
Conjunctivitis		17	16	1	.....	.....	17	
Corneal ulcer		2	.....	2	.....	.....	2	
Foreign body in cornea		20	20	.....	.....	.....	20	
Iritis	1	5	4	1	.....	.....	5	1
Blindness		3	.....	.....	3	.....	3	
Trichiasis		3	.....	3	.....	.....	3	
DISEASES OF THE EAR.								
Chronic inflammation (with ear)		4	.....	4	.....	.....	4	
Otorrhœa		10	4	6	.....	.....	10	
Total	92	1,960	1,420	363	116	38	1,937	115

NOTE.—Some cases not admitted to the hospitals are included in this classification, which accounts for the difference in the number of admissions between the above statistics and the preceding tables.

During the past year, 1,591 inmates of the House of Correction were admitted to the hospital and received treatment. Of this number, twenty-one have died. In the nursery forty-five children were admitted. There were three births, one male and two female children.

I gladly take this opportunity to acknowledge our indebtedness to Commissioner Marshall for his continued and sincere interest in the welfare of the hospital, and his kindness to the sick and unfortunate under our care.

Dr. Paul Carson and Dr. William H. Greene are still associated with me.

Thanking you for the many courtesies extended me, I am,

Very respectfully,

THOMAS F. ROCHE, M.D.,

Resident Physician.

DEER ISLAND, BOSTON HARBOR, February 1, 1899.

CHAPLAIN'S REPORT.

JAMES R. GERRISH, ESQ.,

Master House of Correction, Deer Island :

DEAR SIR,—I am more and more convinced that religious teaching on the island has a beneficial effect, and although the results might be greater, I am yet confident that the Gospel of our Lord, as preached, is helpful to many. With the hope that intemperance shall disappear and many be reformed, I persevere.

Religious services have been held morning and afternoon of each Sunday throughout the year. Miss Clara W. Baker, organist, is faithful to her work. The choirs are composed of inmates of the institution. The Praise Meetings on Tuesday evenings are much enjoyed.

The Library Department is doing good work. The average number of books called for each week is about 650. These are kept in good repair, and both officers and inmates avail themselves of the privilege.

I am very grateful to the Hospital Newspaper Society for the good supply of Christmas cards sent for our women. All these helps give added hope for the ensuing year.

With grateful acknowledgment of your kindly assistance, I am,

Yours respectfully,

W. B. TOULMIN,

Chaplain and Director of Music.

BOSTON, MASS., January 31, 1899.

COUNTY OF SUFFOLK, HOUSE OF CORRECTION,
SOUTH BOSTON, February 1, 1899.

HON. ERNEST C. MARSHALL,

Penal Institutions Commissioner :

DEAR SIR,—I have the honor to submit the following annual report for the year ending January 31, 1899:

The number of prisoners has not varied materially. There were committed :

	Males.	Females.	Total.
1897-98	628	176	804
1898-99	604	218	822

The daily average was :

	Males.	Females.	Total.
1897-98	454	72	526
1898-99	457	80	537
Increase	3	8	11

For additional particulars see tables.

The law relative to prison labor went into effect January 1, 1898. February 1, 1898, our prisoners had scarcely any employment, other than such as could be found for them in the care and improvement of the institution and themselves. Later, in an experimental way, on county account, we have manufactured overalls, jumpers, etc. Broom industry was also introduced for the manufacture of brooms to supply State and county institutions.

With work as above, yard exercise, and calisthenic drill, our prisoners have kept in good physical condition. We hope that other industries may be introduced to the end that all may be employed at least eight hours a day.

The religious services on Sundays are conducted as formerly. Mass at eight o'clock A.M., and Protestant service at one o'clock P.M. The Rev. Robert J. Johnson, rector of the Gate of Heaven parish, was appointed chaplain (Catholic) July 1, 1898. The services, however, are conducted by Rev. Mathew J. Flaherty. Chaplain Rev. S. Stanley Searing's report is annexed.

The usual amount of garden truck and fruit was raised, and supplied to officers and prisoners. There was slaughtered 12,704 pounds of pork.

The school of illiterates, established last year, is doing a good work. (See Teacher's Report appended.)

Many repairs are required, as the buildings and equipments are mostly of long standing. While new buildings in the near future are being considered, the present must be kept in safe and working condition. The gale and unusual high tide of November 27 demolished most of the high wooden fence on the water front. When possible, the mechanical and all other labor is performed by prisoners.

Report of our physician, Dr. Bancroft, is appended.

Thanking you for your ready assistance, I remain,

Respectfully yours,

JOHN C. WHITON,

Master.

VALUATION OF LAND AND BUILDINGS AT HOUSE OF CORRECTION,
SOUTH BOSTON.

Land.

Flats, 1,310,710 feet, at 2 cents . . .	\$26,214 20	
Upland, 631,700 " at 20 cents . . .	126,340 00	
		<u>\$152,554 20</u>

Buildings.

Hospital	\$10,000 00	
Cottage and stable	5,000 00	
House of Correction	50,000 00	
Office and workshops	25,000 00	
Chapel	15,000 00	
Sheds	1,500 00	
Piggery and laundry	8,000 00	
Gas-house	1,000 00	
Master's house	10,000 00	
Stable	3,000 00	
		<u>128,500 00</u>
Total		<u>\$281,054 20</u>

HOUSE OF CORRECTION, SOUTH BOSTON.

Inventory of Property on hand February 1, 1899.

Agricultural		\$1,123 93
Clothing, male	\$1,355 07	
" female	294 55	
		<u>1,649 62</u>
Engineer's Department		2,107 35
General care, inmates	\$1,585 21	
" " offices	1,109 15	
		<u>2,694 36</u>
General expense		1,826 90
Hospital		1,098 67
Laundry		109 07
Manufacturing Department		855 89
Repair shop		290 90
School		103 30
Store		8,905 28
Subsistence, inmates		242 35
" subsidiary		713 81
		<u>\$21,721 43</u>
Total		

STATISTICAL TABLES.

TABLE NO. 1.

Showing Population for the Year ending January 31, 1899.

	Males.	Females.	Total.
Remaining January 31, 1898	463	60	523
Committed by courts.....	599	216	815
Transferred from House of Correction, Deer Island.....	2	1	3
Transferred from Concord Reformatory	1	.....	1
Transferred from Reformatory Prison for Women .....	.....	1	1
Returned from escape	2	.....	2
Total	1,067	278	1,345
Discharged	645	206	851
Remaining January 31, 1899	422	72	494

TABLE NO. 2.

Showing Number of Prisoners Received each Month.

	Males.	Females.	Total.
Remaining January 31, 1898.....	463	60	523
Received in February, 1898.....	50	22	72
“ “ March, “	58	26	84
“ “ April, “	52	34	86
“ “ May, “	42	24	66
“ “ June, “	67	15	82
“ “ July, “	42	14	56
“ “ August, “	37	7	44
Carried forward	811	202	1,013

TABLE NO. 2.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	811	202	1,013
Received in September, 1898.....	65	16	81
“ “ October, “	52	13	65
“ “ November, “	45	8	53
“ “ December, “	45	17	62
“ “ January, 1899.....	49	22	71
Totals	1,067	278	1,345
Discharged in year ending January 31, 1899	645	206	851
Remaining January 31, 1899	422	72	494

TABLE NO. 3.

Showing Number of Prisoners Discharged each Month.

	Males.	Females.	Total.
Discharged during February, 1898	46	18	64
“ “ March, “	52	13	65
“ “ April, “	53	13	66
“ “ May, “	56	15	71
“ “ June, “	52	16	68
“ “ July, “	65	14	79
“ “ August, “	49	30	79
“ “ September, “	41	28	69
“ “ October, “	51	23	74
“ “ November, “	50	12	62
“ “ December, “	65	13	78
“ “ January, 1899	65	11	76
Totals	645	206	851

TABLE NO. 4.

Daily Average.

	Males.	Females.	Total.
February, 1898.....	459	59	518
March, "	469	75	544
April, "	466	87	553
May, "	468	102	570
June, "	464	108	572
July, "	456	107	563
August, "	445	95	540
September, "	447	78	525
October, "	462	67	529
November, "	460	59	519
December, "	450	56	506
January, 1899.....	433	68	501
Maximum population	477	110	587
Minimum population.....	422	71	493
Daily average	457	80	537

TABLE NO. 5.

Showing How Discharged.

	Males.	Females.	Total.
Expired sentence.....	562	186	748
Fines paid (amounting to \$1,695).....	15	7	22
By order of Municipal Court, after serving three months; fines not paid	12	6	18
Pardoned by Governor.....	6	1	7
" " Commissioner.....	12	2	14
<i>Carried forward</i>	607	202	809

TABLE NO. 5.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	607	202	809
By order of Commissioner of Prisons..	2	.....	2
Sentenced to State Prison by Superior Court.....	1	.....	1
Transferred to House of Correction, Deer Island.....	9	3	12
Transferred to Concord Reformatory..	14	.....	14
Transferred to Reformatory Prison for Women.....	.....	1	1
Transferred to Lunatic Hospital.....	7	.....	7
Died.....	4	.....	4
Escaped.....	1	.....	1
Total.....	645	206	851

TABLE NO. 5A.

Gain or Loss in Weight of Prisoners Discharged.

	Males.	Females.	Total.
Number who gained.....	454	129	583
“ “ lost.....	148	59	207
Number who neither gained nor lost ..	43	18	61
Pounds gained	3,981	1,228	5,209
Pounds lost	1,076	423	1,499
Average pounds net gain.....	4 lb. 4 $\frac{1}{2}$ oz.	4 lb. 3 $\frac{1}{2}$ oz.	4 lb. 4 $\frac{1}{2}$ oz.

TABLE NO. 6.

Showing Number of times Committed to this Institution.

	Males.	Females.	Total.
First	447	149	596
Second	73	35	108
Third	31	21	52
Fourth	20	6	26
Fifth	12	1	13
Sixth	7	3	10
Seventh	3	.....	3
Eighth .....	.....	1	1
Ninth	1	.....	1
Tenth	1	.....	1
Eleventh	1	.....	1
Twelfth	1	.....	1
Fourteenth	1	.....	1
Twenty-second	1	.....	1
Total	599	216	815

TABLE NO. 7.

Showing from what Courts Committed.

	Males.	Females.	Total.
Municipal Criminal Court	281	169	450
Superior " "	256	34	290
South Boston District Court	47	12	59
Roxbury " "	10	1	11
Dorchester " "	4	.....	4
Brighton " "	1	.....	1
Total	599	216	815

TABLE NO. 8.

Showing Offences for which Committed.

	Males.	Females.	Total.
<i>Against Person.</i>			
Assault.....	5	.....	5
Assault with a dangerous weapon.....	6	.....	6
“ “ “ knife.....	2	1	3
“ “ “ pistol.....	13	.....	13
“ “ intent to rob.....	4	.....	4
Assault and battery.....	54	2	56
“ “ “ on an officer.....	5	.....	5
“ “ “ “ a police officer.....	1	.....	1
“ “ “ with a knife.....	4	.....	4
“ “ “ “ a razor.....	2	.....	2
Assault and battery with a sharp instrument.....	2	.....	2
Assault and battery with a weapon....	1	.....	1
Indecent assault.....	3	.....	3
Manslaughter.....	2	.....	2
Rape.....	2	.....	2
	106	3	109
<i>Against Property.</i>			
Attempting to break and enter.....	2	.....	2
“ “ commit larceny.....	2	.....	2
Attempting to commit larceny from the person.....	5	.....	5
Attempting to obtain money by false pretences.....	3	.....	3
Breaking and entering.....	60	1	61
<i>Carried forward.....</i>	72	1	73

TABLE NO. 8.—*Continued.*

	Males.	Females.	Total.
<i>Against Property. — Continued.</i>			
<i>Brought forward</i>	72	1	73
Breaking and entering and larceny from realty	13	.....	13
Cheating by means of false pretences..	5	.....	5
Common and notorious thief.....	2	.....	2
Concealing personal property held under conditional contract of sale....	.....	1	1
Conspiracy with intent to cheat and defraud.....	2	.....	2
Conspiracy to commit robbery.....	2	.....	2
Embezzlement	6	1	7
Embezzlement of property and larceny of property	1	.....	1
Forgery	1	.....	1
Forgery and uttering.....	3	.....	3
Larceny.....	198	23	221
“ from a common carrier.....	4	.....	4
“ “ a conveyance.....	4	.....	4
“ “ an express wagon.....	1	.....	1
“ “ the person.....	17	3	20
“ “ realty	3	.....	3
“ in a building.....	10	1	11
Larceny of property and unlawful ap- propriation.....	2	.....	2
Mischievously taking and driving a horse without consent of the owner..	1	.....	1
Obtaining money by false pretences...	2	.....	2
“ property by false pretences..	6	.....	6
Receiving stolen goods	4	.....	4
<i>Carried forward</i>	359	30	389

TABLE NO. 8.—*Continued.*

	Males.	Females.	Total.
<i>Against Property.—Concluded.</i>			
<i>Brought forward</i>	359	30	389
Receiving stolen property.....	3	.....	3
Robbery	5	.....	5
Unlawfully appropriating a horse.....	1	.....	1
Unlawful appropriation of a horse and vehicle.....	1	.....	1
Uttering forged checks and orders....	1	.....	1
“ “ instruments	1	.....	1
Vending merchandise having forged labels.....	1	.....	1
	272	30	402
<i>Against Public Order and Decency.</i>			
Adultery	7	2	9
Attempting to vote on a name other than his own at a caucus.....	1	.....	1
Being a vagabond	7	1	8
“ a vagrant.....	14	1	15
Common nightwalker .....	.....	25	25
Contempt of Court.....	1	.....	1
Cruelly beating a horse.....	1	.....	1
“ killing a horse.....	1	.....	1
Detaining a woman in a house resorted to for prostitution.....	1	.....	1
Drunkenness.....	18	86	104
Fornication	12	14	26
Holding himself out as a physician, not being registered.....	1	.....	1
<i>Carried forward</i>	64	129	193

TABLE NO. 8.—*Continued.*

	Males.	Females.	Total.
<i>Against Public Order and Decency.—</i> <i>Continued.</i>			
<i>Brought forward</i>	64	129	193
Idle and disorderly.....	13	36	49
Indecent exposure of person.....	7	.....	7
Keeping a disorderly house.....	.....	1	1
“ a noisy and disorderly house.....	1	.....	1
Keeping and maintaining a common liquor nuisance.....	1	.....	1
Keeping and maintaining a house of ill- fame.....	4	6	10
Keeping, setting up and maintaining a lottery.....	1	.....	1
Lewd and lascivious cohabitation.....	6	1	7
“ “ “ person.....	1	1	2
Neglecting to provide for support of wife and minor children.....	1	.....	1
Non-support of wife and minor chil- dren.....	3	.....	3
Obstructing foot travellers on a public street.....	1	.....	1
Open and gross lewdness.....	1	.....	1
Perjury.....	3	.....	3
Polygamy.....	1	.....	1
Rescue of a prisoner.....	1	.....	1
Setting up and promoting a policy lot- tery.....	1	.....	1
Subordination of perjury.....	1	.....	1
Unlawfully exposing and keeping for sale intoxicating liquors.....	1	2	3
Unlawfully selling an obscene print...	1	.....	1
<i>Carried forward</i>	113	176	289

TABLE NO. 8.—*Concluded.*

	Males.	Females.	Total.
<i>Against Public Order and Decency.— Concluded.</i>			
<i>Brought forward</i>	113	176	289
Unlawfully selling intoxicating liquors,	2	7	9
Unlawfully voting upon a name other than his own at a caucus.....	1	.....	1
Voting illegally.....	1	.....	1
Voting upon a name other than his own at an election.....	2	.....	2
Wantonly breaking glass.....	2	.....	2
Total	121	183	304

TABLE NO. 9.

Showing Sentences of Prisoners Committed During the Year.

	Males.	Females.	Total.
Fines	50	30	80
Thirty days.....	1	.....	1
Sixty “	1	.....	1
1 month	8	4	12
2 months	43	12	55
3 “	58	36	94
4 “	71	46	117
5 “	4	10	14
6 “	102	56	158
7 “	1	.....	1
8 “	15	.....	15
9 “	18	6	24
10 “	5	1	6
<i>Carried forward</i>	377	201	578

TABLE NO. 9.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	377	201	578
12 months	81	10	91
14 " 	1	.....	1
15 " 	7	.....	7
16 " 	2	.....	2
18 " 	26	1	27
24 " 	52	.....	52
30 " 	14	.....	14
36 " 	26	2	28
48 " 	8	.....	8
60 " 	1	.....	1
60 days and fine.....	1	.....	1
4 months and fine	2	1	3
5 " " " 	1	.....	1
6 " " " .....	.....	1	1
Total	599	216	815

TABLE NO. 10.

Showing Ages of Prisoners Committed.

	Males.	Females.	Total.
Under 20 years.....	38	3	41
20 to 29 years (inclusive).....	297	101	398
30 " 39 " " 	153	79	232
40 " 49 " " 	76	27	103
50 " 59 " " 	24	5	29
60 " 69 " " 	10	1	11
70 " 79 " " 	1	.....	1
Total	599	216	815

TABLE NO. 11.

Color.

	Males.	Females.	Total.
White	546	197	743
Black.....	53	19	72
Total	599	216	815

TABLE NO. 12.

Social Relations.

	Males.	Females.	Total.
Married	189	109	298
Single	410	107	517
Total.....	599	216	815

TABLE NO. 13.

Education.

	Males.	Females.	Total.
Could read and write.....	548	174	722
Could read only.....	1	9	10
Could not read or write	45	29	74
Could not read or write, born in Massachusetts	5	4	9
Total.....	599	216	815

TABLE NO. 14.

Nativity.

	Males.	Females.	Total.
BORN IN UNITED STATES.			
Alabama	1	.....	1
Arkansas	1	.....	1
Connecticut	4	.....	4
District of Columbia	4	.....	4
Florida	2	.....	2
Georgia	9	.....	9
Illinois	2	1	3
Iowa	2	1	3
Kentucky	1	.....	1
Louisiana .....	.....	1	1
Maine	15	13	28
Maryland	1	.....	1
Massachusetts	240	73	313
Michigan	1	.....	1
Missouri	4	.....	4
New Hampshire	10	3	13
New York	30	5	35
North Carolina	3	2	5
Ohio	3	.....	3
Pennsylvania	8	2	10
Rhode Island	5	2	7
South Carolina	3	2	5
Tennessee	2	.....	2
Vermont	12	.....	12
Virginia	10	3	13
Total	373	108	481

TABLE NO. 14.—*Continued.*

	Males.	Females.	Total.
BORN IN FOREIGN COUNTRIES.			
Armenia.....	3	.....	3
At Sea.....	.....	2	2
Australia	1	.....	1
Azores	2	.....	2
Bermuda	1	1	2
Cape Breton Island.....	1	1	2
Cuba	1	.....	1
Denmark	1	.....	1
England	26	11	37
France	2	.....	2
Germany.....	6	1	7
Greece	2	.....	2
Ireland	67	49	116
Italy	34	2	36
Morocco	1	.....	1
New Brunswick.....	9	10	19
Newfoundland	1	1	2
Norway	4	.....	4
Nova Scotia.....	16	10	26
Prince Edward Island	7	5	12
Quebec	8	8	16
Russia.....	17	.....	17
Scotland.....	6	4	10
South America.....	1	.....	1
Spain.....	1	.....	1
Sweden.....	5	2	7
<i>Carried forward</i>	223	107	330

TABLE NO. 14.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	223	107	330
Switzerland.....	1	.....	1
Turkey.....	1	.....	1
West Indies.....	2	.....	2
Totals.....	226	108	334
Born in the United States.....	373	108	481
Grand Totals.....	599	216	815

TABLE NO. 15.

Showing Industrial Relation.

	Males.	Females.	Total.
Athlete.....	1	.....	1
Baker.....	12	.....	12
Barber.....	8	.....	8
Bartender.....	1	.....	1
Bell-boy.....	3	.....	3
Beltmaker.....	1	.....	1
Bicycle enameller.....	1	.....	1
Bicycle repairer.....	1	.....	1
Blacksmith.....	4	.....	4
Blacksmith's helper.....	2	.....	2
Boilermaker.....	2	.....	2
Bookbinder.....	2	.....	2
Book-keeper.....	5	.....	5
Bootblack.....	4	.....	4
<i>Carried forward</i>	47	.....	47

TABLE NO. 15.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	47	.....	47
Bottler	1	.....	1
Brakeman	4	.....	4
Brass-finisher	2	.....	2
Brass-moulder	1	.....	1
Brass-polisher	1	.....	1
Bricklayer	1	.....	1
Broker	2	.....	2
Broom-maker	1	.....	1
Butcher	2	.....	2
Butler.....	1	.....	1
Button-hole machine operator .....	.....	2	2
Candy-maker	3	.....	3
Canvasser	2	.....	2
Car-cleaner	1	.....	1
Carpenter.....	18	.....	18
Carriage painter	1	.....	1
Chair finisher.....	1	.....	1
Chambermaid.....	.....	3	3
Clerk	10	.....	10
Cloth-cutter	2	.....	2
Coal-passer	2	.....	2
Coachman	1	.....	1
Coatmaker.....	.....	1	1
Cobbler.....	1	.....	1
Collector	1	.....	1
Commission dealer	1	.....	1
<i>Carried forward</i>	107	6	113

TABLE NO. 15.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	107	6	113
Cook	21	12	33
Coppersmith	1	.....	1
Coppersmith's helper	1	.....	1
Coremaker	2	.....	2
Decorator	1	.....	1
Dressmaker .....	.....	1	1
Drug clerk	1	.....	1
Druggist	3	.....	3
Edge-trimmer	2	.....	2
Electrician	1	.....	1
Electrotypewriter	1	.....	1
Engineer	4	.....	4
Engraver	2	.....	2
Farmer	6	.....	6
Farm-hand	1	.....	1
Fireman	14	.....	14
Fish-cutter	2	.....	2
Fisherman	3	.....	3
Fruit-packer	1	.....	1
Fruit-pedler	2	.....	2
Furnace-worker	1	.....	1
Gas-fitter	1	.....	1
Gilder	2	.....	2
Glass-worker	1	.....	1
Glove-cutter	1	.....	1
Grocer's clerk	1	.....	1
<i>Carried forward</i>	183	19	202

TABLE NO. 15.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	183	19	202
Hack-driver	1	.....	1
Harness-maker.....	1	.....	1
Horse-dealer.....	1	.....	1
Horse-shoer	1	.....	1
Hostler.....	22	.....	22
Hotel-keeper	1	.....	1
House-cleaner	1	.....	1
Housework .....	.....	160	160
Interpreter	1	.....	1
Iron-moulder	1	.....	1
Iron-worker	1	.....	1
Jeweler.....	2	.....	2
Kitchen-work .....	.....	2	2
Laborer	105	.....	105
Lather	1	.....	1
Laundress .....	.....	8	8
Laundry-man	1	.....	1
Leather-dresser	1	.....	1
Ledgeman	1	.....	1
Lineman.....	1	.....	1
Locksmith.....	1	.....	1
Lodging-house keeper.....	.....	1	1
Longshoreman.....	1	.....	1
Machinist.....	5	.....	5
Machinist's helper	1	.....	1
Manicure .....	.....	1	1
Mason	8	.....	8
<i>Carried forward</i>	342	191	533

TABLE NO. 15.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	342	191	533
Mason-tender	1	.....	1
Meat-cook	1	.....	1
Meat-cutter.....	1	.....	1
Merchant	1	.....	1
Messenger-boy	2	.....	2
Mill-hand.....	1	.....	1
Miner	1	.....	1
Motorman	1	.....	1
Moulder	1	.....	1
Musician	1	.....	1
Never worked.....	1	1	2
Nurse	2	1	3
Painter	25	.....	25
Pants-maker	1	.....	1
Paper-maker.....	1	.....	1
Pedler.....	16	.....	16
Physician.....	1	.....	1
Piano polisher	1	.....	1
Plasterer.....	2	.....	2
Plumber	2	.....	2
Plumber's helper.....	3	.....	3
Porter	1	.....	1
Printer	10	.....	10
Real estate agent.....	1	.....	1
Real estate dealer	1	.....	1
Roofer.....	8	.....	8
<i>Carried forward</i>	429	193	622

TABLE NO. 15.—*Continued.*

	Males.	Females.	Total.
<i>Brought forward</i>	429	193	622
Rubber-coat maker		1	1
Rubber-worker	3		3
Sailor	7		7
Salesman	16	1	17
Saw-mill	1		1
Scene-painter	1		1
Seamstress		4	4
Sewing-machine adjuster	1		1
Shoe-burnisher	1		1
Shoe-cutter	1		1
Shoe-finisher	1		1
Shoe-fitter	1		1
Shoe-laster	7		7
Shoemaker	6		6
Shoe-stitcher	4	1	5
Shoe-treer	1		1
Sign-painter	1		1
Singer	1		1
Silversmith	1		1
Spinner		1	1
Spring-bed maker	2		2
Steamfitter	3		3
Steward	1		1
Stonecutter	2		2
Stone-mason	1		1
Storekeeper	1		1
<i>Carried forward</i>	493	201	694

TABLE NO. 15.—*Concluded.*

	Males.	Females.	Total.
<i>Brought forward</i>	493	201	694
Tailor	6	2	8
Teacher	1	.....	1
Teamster	51	.....	51
Ticket agent	1	.....	1
Tinsmith	5	.....	5
Tobacco-stripper.....	.....	1	1
Track-layer.....	1	.....	1
Undertaker	1	.....	1
Upholsterer	3	.....	3
Vamper	3	.....	3
Varnisher	1	.....	1
Waiter.....	25	11	36
Watchman.....	1	.....	1
Weaver	2	1	3
Wheelwright.....	1	.....	1
Whitewasher.....	2	.....	2
Wire-worker	1	.....	1
Wool-spinner	1	.....	1
Totals	599	216	815

BOSTON, January 31, 1899.

To COL. JOHN C. WHITON,

Master of the House of Correction :

SIR,—I have the honor to submit the following report of the Medical Department of this institution for the year ending January 31, 1899:

Patients remaining in hospital February 1, 1898 . . .	16
Number admitted since	182
Total number treated in hospital, February 1, 1898, to January 31, 1899, inclusive	198
Number discharged	175
Number died	4
Remaining in hospital January 31, 1899	19

The following list gives the names of the diseases, and the number of times patients have been treated, in the hospital:

MEDICAL.

Alcoholism	17	Malaria	5
Asthma	1	Malingerer	11
Bright's disease	1	Melancholia	3
Bronchitis	9	Menorrhagia	1
Cholera morbus	1	Neuralgia	8
Constipation	2	Not developed	3
Debility	4	Œdema of lung	1
Diarrhœa	2	Opium habit	4
Epilepsy	1	Pleurisy	2
Febricula	5	Rheumatism	6
Gastric ulcer	1	Salpingitis	1
Gastritis	1	Syphilis	7
Heart disease, valvular	5	Tonsillitis	5
“ irritable	2	Tuberculosis of lung	12
Influenza	16	Weak-minded	1
Insane	7		
Leucorrhœa	3	Total	149
Paralysis, lumbar	1		

SURGICAL.

Abscess	9	Inflamed toe	1
Adinitis	1	Iritis	1
Bruise	2	Laryngitis	1
Bubo	1	Piles	5
Burn	1	Sprain	4
Carbuncle	2	Stricture of urethra.	1
Caries of teeth	1	Ulcer	7
Cystitis	3	Wounds	5
Fracture	2		
Gonorrhœa	2	Total	49

Four men have died during the year of the following-named diseases: Edema of the lung, valvular disease of the heart (two), pulmonary tuberculosis.

Seven men have been transferred to the hospital for insane criminals.

Respectfully,

W. B. BANCROFT,

Physician.

CHAPLAIN'S REPORT.

SOUTH BOSTON, February 1, 1899.

COL. JOHN C. WHITON,

Master of the House of Correction :

SIR,—As Chaplain and Librarian of this institution it is my duty and privilege to submit the following report for the year ending January 31, 1899:

STATISTICS.

The following is an abbreviated statement of donations made to the library during the past twelve months:

	Volumes.
Inmates' donation	485
Periodicals sent to inmates	1,553
Special appropriation	497
Mrs. Spooner's donation	304
From Deer Island	160
From S. P. C. A. of Mass.	.8
From Mr. Owens	3
From Mrs. J. C. Whiton	1
From Mrs. W. A. Witham	3
From officer Stevens	3
Chaplain's donation	14

In addition to the above we have received from the Catholic World Company of New York one year's subscription of the magazine of same name; and from the Hospital Newspaper Society (by Mrs. S. E. Guild) three barrels of books and magazines which have not yet been bound in volumes and put into circulation, as they have been so recently received.

We feel especially grateful that we have been so generously supplied with religious literature (prayer-books, catechisms, testaments, etc.), believing that all these things are silent agencies for good whose value cannot be overestimated.

During the past year we have been able to add very materially to the separate libraries in the men's and women's hospitals; and we feel more than ever convinced that proper reading in prison has a great deal to do in the work of reformation of character which we are trying to carry on in this institution.

Two years ago we published a catalogue and inaugurated our present library system. Now we have just prepared a supplement to the catalogue which is in the hands of the

printer and will, we hope, soon be issued and put into the hands of the inmates so that they may have the perusal of about 500 additional volumes.

The chaplain feels particularly grateful for all the kind offices he has received from the Commissioner, Assistant Commissioner, Master and Deputy Master in aiding in every possible way his efforts to establish and maintain the library and make the distribution system a successful one.

CHAPEL SERVICES.

Sunday services have been held as in past years, and have been well attended by the inmates. We have had quite a number of speakers, clergymen and laymen, including the Bishop of Massachusetts, the Right Reverend William Lawrence, D.D., LL.D., who have by encouraging words and helpful manners done much to aid us in the performance of our religious work. The organist (Mr. Whittier) and the chorus choir have added materially to the brightness of our services, and the hearty congregational singing of the men and women have been an inspiration to the preacher.

The chaplain has interviewed prisoners before their discharge, and has seen privately many who have come to him for counsel and advice as well as for comfort and consolation in times of discouragement and affliction. The burial service has been read once over the unclaimed body of a deceased inmate, and the Sacraments have been administered as often as required.

The chaplain wishes to express to the officers and matron his hearty appreciation of their support during the past year, and to assure them of his personal thankfulness for all the courtesies they have extended to him in the prosecution of his labors.

Respectfully submitted,

S. STANLEY SEARING,

Chaplain.

TEACHER'S REPORT.

SOUTH BOSTON, January 31, 1899.

COL. JOHN C. WHITON,

Master of the House of Correction :

SIR,—I herewith respectfully submit to you the second annual report of the school.

At the date of the last report the school had only just been fairly started; it was as yet a sort of novelty, and consequently what might be said of it by the inmates could hardly be relied upon.

During the past year, however, I have observed and noted the aspect of the men toward the school. The pupils in their letters to outsiders, and in the numerous short compositions which they were required to write in the course of the year, have given many unmistakable expressions of their appreciation of the fact that they have been given an opportunity to go to school.

One of the scholars writing to a friend says, "I began to go to school on the first of February, and am sorry I did not start sooner. I think the school is a very good thing for those who wish to improve themselves." An Italian, in the fervor of his first experience of school life, writes, "I will try to learn all I can while I am here. I am very anxious to learn. I thank our government for giving us this chance." Another writes, "I am thankful I got this opportunity to go to school, for I was badly off in spelling." One who was about to leave the institution writes, "I hope that this school will be continued, for it has done much good since it has been started."

Now a quotation or two to show what the pupils have to say of their progress. D —, "I have learned a great deal since I came to school, and by the time I go out I will be all right." G —, "We attend school two hours a day, and they are very pleasant hours I assure you." M —, "I am more than satisfied, for I did not think I could learn so much. I shall have a good common school education before get my liberty." B —, "In arithmetic I am getting I along slowly, but well; if I do not succeed, it will be my own fault." C —, "I have learned a great deal in geography, and find the study very interesting." L —, "When I first came to school I thought I would never learn fractions, but I have learnt them."

These and various other expressions of approval were received on every side. A young Italian boy about sixteen years of age has this to say in his first letter, "I shall now be able to read the newspapers and know when any one wants to hire a boy."

The whole of the following letter will be of interest :

SOUTH BOSTON, June 30, 1898.

G. T. C —, Esq.:

DEAR SIR,—Pray forgive me for taking the liberty to address you these few lines to try to sincerely express you my feelings of gratitude for your kindness and the zeal with which you devote yourself for our education.

I came to school first two months ago, and then I had only a few notions of your language, that is to say, just what I learned by myself in the streets. Well, in spite of the rules of the House, forbidding to speak to one another, I am sometimes surprised and delighted to see how easily I make myself understood. You must have noticed too, that in your dictations I make only a few mistakes in the hardest words. All that renders me very happy, believe me sir.

I shall leave school at Christmas, and I hope to be able, when, I go, to speak English fluently, and write it the same way. It being so, I am certain to find easy a situation when I go back to France for the next exhibition. And have a good remembrance of my sojourn in Boston, where, in spite of my misadventure, I will have learned, in so short a time, a language of which I am so fond.

I don't speak so much about the other sciences because it is for the language that I care most, but you know something about my improvement in Arithmetic. It is a blessing and a consolation for illiterate people, and above all strangers to have, an opportunity to learn in their misfortune a thing so necessary : to speak. It is at least, my humble opinion.

And I pray you dear Sir, to welcome my thanks and my humble respects.

Yours gratefully,

ROBERT H——.

A description of the class of men that attend the school would not be an easy matter. They are from almost every clime. They are from Europe and from America. Some of them are from Canada ; some from different parts of the United States ; some from the various South American Republics. Russia, Italy, France, Germany, Norway, Sweden, all have representatives. Even the little kingdom of far-off Greece is represented. Considering their number, it is hard to find a more cosmopolitan body. With regard to the ages of the men there is the same wide diversity. Their ages range all the way from sixteen to fifty-seven years. The young boy and the old gray-haired man sit side by side. Very few, however, are under twenty or over thirty years of

age. The average age is about twenty-eight years; so that youth, and strength, and hope, and a bright future are with these men, if they could be brought to realize it.

But questions of far greater importance for the proper conduct of the schools than age or nationality are: What has been the previous education of these men? How long will they be able to go to school? The majority of the men are able to go to school from six to nine months. A few have only two or three months for schooling.

A much smaller number have two or three years. In the latter case there is ample time. Now when you come to ask, "What has been the previous education of the men?" the teacher becomes perplexed and knows not what to say. They are neither here nor there. They are from every school and from no school. They belong to every grade, and yet are a poor type of any grade. One-half of the men have never been to any school. A part of the remaining half have had a very short and a very irregular school term. About one-fourth of the men have had a fair primary-school education, but they have forgotten most of what they knew. Before closing this point it may be well to remark that, though the education of these has been neglected, they are not at all wanting in ability to grasp and understand an idea when it is presented. It is very rare that a scholar is found to be hopelessly deficient in talents.

Despite the fact that only illiterates are granted permission to enter the school, from the first of last February, 1898, to the date of the present report, 160 men have been under instruction for longer or shorter periods. The school began its second term on the first of last February, 1898, with seventy-five pupils. Between the first of February, 1898, and the thirty-first of January of the present year, eighty-four new pupils have been admitted. Now, there are eighty pupils in regular attendance at the school. The average attendance for the year was about seventy-five pupils. From the above figures, it can easily be seen that there is a continual change going on in the school, a constant coming and going.

OUTLINE OF STUDIES.

First Primary,	{	Section A,	{	First Reader.
			{	Spelling.
			{	Writing.
			{	Language.
			{	Numbers.
	{	Section B,	{	Second Reader.
			{	Spelling.
			{	Writing.
			{	Language.
			{	Numbers.
Second Primary,	{	Section C,	{	Third Reader.
			{	Arithmetic.
			{	Writing.
			{	Spelling.
			{	Language.
			{	Geography.
	{	Section D,	{	Fourth Reader.
			{	Arithmetic.
			{	Grammar.
			{	Geography.
			{	Spelling.
			{	Writing.
			{	Supplementary Reading from
			{	United States History.

The school is in session four hours a day, two hours in the morning, and two hours in the afternoon. The morning hours are from 9 to 11 o'clock; the afternoon hours are from 2 to 4 o'clock. School is held six days of the week.

Enough has been said of the school to show what has been and what under present conditions must continue to be its scope and aim. Where the men, in whose interest the school has been organized, all belong to the Primary grades, where the men of these grades only are granted admission (it has not as yet been deemed expedient to extend the usefulness of the school to others), where the men have necessarily a short school term, the teacher must keep strictly to the work of the elementary grades. Reading, writing and arithmetic become the all important and essential branches. Any multiplication of branches of study would tend only to distract and divert the attention from what should be first and foremost. There may be several sections in reading and writing and arithmetic. These sections might even be required either to meet the different needs of the pupils who

are entering or to make it possible to advance a pupil without loss of time, as soon as his progress demands it. However this may be, the work must be kept within the prescribed lines. The teacher, in this instance, realizing the conditions under which he labored, has carefully observed these principles, but not always too rigidly. He has realized that if he is to be successful in teaching the elements of reading, writing and arithmetic, he must awaken the minds of his pupils, he must interest them, he must give them occasional glimpses of the wonderful things that are not described in their little readers. Thus, in the course of the year, many readings were given in geography, in history and in the natural sciences. The opening and broadening effects of these readings upon the minds of the pupils were often surprising. They opened new worlds of thought, and the pupils longed to explore them.

Respectfully submitted,

JOHN A. ELLIOTT,

Teacher.



ANNUAL REPORT
OF THE
PRINTING DEPARTMENT
FOR THE YEAR 1898.

OFFICE OF THE SUPERINTENDENT OF PRINTING,
BOSTON, MASS., June 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston:

SIR, — Pursuant to the provision of chapter 3, section 24, of the Revised Ordinances of 1898, and the order of the City Council of January 3, 1899, I herewith submit a detailed report of the transactions of the Printing Department for the financial year beginning February 1, 1898, and ending January 31, 1899.

In order to understand clearly the result of the past year's operation of the Municipal Printing Department in all its bearings, I deem it necessary to make some special observations. My report for the year ending January 31, 1898, which contained the details for the first eleven months' operation of the department by the city, showed that after allowing for depreciation in value of material at the rate of 10 per cent. per year, a net gain to the city treasury was made of \$8,004.30, as compared with the work as previously done by private parties under the contract system. This result was obtained by making a comparison of the same

rates of charges made by this department to the other departments of the city, as had been paid for the last twenty years according to the terms of the contract made.

The department has been conducted in a business-like manner, and with a proper regard to the rules of the Typographical Union. In some respects the employees have been treated with consideration beyond that accorded their fellow workmen in the service of most private printers. As an instance of this I may say that holidays throughout the year are enjoyed as part compensation for services rendered; that during the months of May, June, July, August, September and October of last year all the employees were allowed the Saturday half-holiday without loss of pay, making the hours of labor 49 hours per week for six months of the year, and 54 hours per week for the remaining six months. The granting of these holidays resulted in greater efficiency and a desire on the part of the employees to show their appreciation for the consideration accorded them. I can safely say the department lost nothing, as the difference in the working time was substantially made up by increased diligence and care on the part of the employees.

At certain seasons of the year the work of the department necessitates the temporary employment of a large number of compositors. These are readily obtained, and they understand, when engaged, that they are to remain only until such time as the extra work is completed.

Without doubt the Printing Department or any other department of a city can be conducted in a negligent, extravagant or wasteful manner just as a private business of like nature. The measure of success in carrying on any branch of industry is determined chiefly by the method pursued. If the method is a bad one in any respect the result will not be a success.

It is my opinion, based on what has been accomplished, that the methods adopted in the Municipal Printing Department are the best known, though the department is constantly on the lookout for opportunities for improvement.

It is with pleasure I point to the men and women who perform the respective duties to which they are assigned in this department of the city. For intelligence, competency, and faithfulness they will compare favorably with those employed in the best printing houses of the country. They render faithful service for fair wages and generous consideration, and the result undoubtedly indicates that the city has gained financially by doing its own work in this regard instead of having it performed by private concerns as for-

merly. And far beyond the mere financial gain is the spirit of content and satisfaction among the workers, which is due in no small degree to the fact that they feel they are secure in their positions so long as they are capable and faithful.

A summary of the doings for the past municipal year ending January 31, 1899, may be briefly stated thus :

The total business performed during the year amounted to \$152,136.72. The operating expenses for the year aggregated \$137,967.85, of which \$78,024.87 was on account of pay-roll. Allowing for depreciation in the value of the material of the Plant at 10 per cent. per annum, the rate considered fair by the most reliable judges, we find that the city has saved the sum of \$10,386.08 during the year by attending to its own printing.

That there be no question, I desire to state that these figures are deduced by a comparison of the prices charged to the departments by this department, and prices paid by the city to the firm which had the contract for doing the city printing previous to the establishing of the City Printing Plant. This department has been charging precisely the same rates to other departments for printing as was paid by them to the former City Printers with whom the city had a contract, and which contract was in operation for over twenty years.

In other words, had the same amount of printed matter of like quality been produced under the terms of that contract, the city would have paid \$10,386.08 more than it has paid. It will therefore be seen that during the first twenty-three months of municipal operation of the Plant a saving has been effected amounting to \$18,390.38.

I point to this pleasant and satisfactory showing with not a little pride, and invite the closest scrutiny of all interested into the statements here made and the working of the department in every particular.

The experimental stage in operating the Municipal Printing Plant of the city has passed. It has been proven to be a practical success, and I point out these important facts, justifying as they do the faith of the Chief Executive of the city in the undertaking, and his promise to the citizens of Boston that the city would be a larger gainer in it.

In this connection I desire to recommend that the rates at which some of the charges are made to the different departments be revised and reduced in order to correspond more nearly with the present condition of the printing industry.

Some of the rates were made many years ago, and though still in use in the department they were made necessary, as I have already explained, in order to get a proper basis of comparison.

In accordance with the policy established by you at the beginning, the books of accounts and the transactions of the year have been examined by a committee of experts, consisting of Messrs. H. G. Curtis, Chairman, President of the Old Boston National Bank, George H. Ellis, Frederick Mills and Thomas P. Nichols, members of the Masters Printers' Club.

Their report covers the operations of the Plant for the financial year ending January 31, last. The financial statistics of the report cover in detail the facts which I have given in a general way in the foregoing. The report of the committee, which can be found commencing on page 41, speaks for itself.

That its progress has been watched with keen interest throughout the country has been made manifest by the hundreds of inquiries received by mail at this office, from city officials and other interested persons, respecting the cost of the Plant, the system of management and such other information as might serve the object of the inquirers. A number of visitors also, not only from many cities in the United States but some from European cities, have called personally to investigate, and to see the working of the department. I have endeavored, as far as practicable, to meet the desire of every one seeking information on the matter.

The rather unfair and bitter opposition that the experiment of municipal operation encountered at the start has served a very good purpose. It aided to attract and concentrate widespread public attention to the experiment. Already in some localities propositions have been made to establish like public institutions; in many places the subject is mooted and thought is quickened and ripening upon it.

Reckless opposition in Boston has practically died out. All citizens in view of the accomplished facts must be gratified at the progress achieved. In a special manner the present Chief Executive of the city, who took the official initiative toward establishing the Municipal Printing Plant — the first of its kind in the country — should feel gratified.

The excellent showing which is made, in my judgment, amply justifies the claims of its advocates, and there is no sound reason why as great if not a greater measure of success should not attend the working of the Plant in the time to come.

FINANCIAL STATEMENT.

The following is a statement of the appropriation and revenue received from printing, postage, rents, power, heating, etc.; also expenditures, paid up to January 31, 1899:

CREDITS OF PRINTING DEPARTMENT COLLECTED FROM FEBRUARY
1, 1898, TO JANUARY 1, 1899.

Appropriation	\$28,800 00
Revenue from printing, uncollected Feb. 1, 1898	14,819 41

Printing done at Plant, as follows:

Assessing Department	\$11,053 32
Auditing Department	393 17
Building Department	1,864 65
Board of Aldermen, Contingent Fund, ...	637 70
Bath Department	101 78
Collecting Department	1,275 63
City Clerk Department	270 07
City Messenger Department	765 94
Clerk of Committees Department	238 81
City Council, Incidental Expenses	1,611 89
City Council Proceedings	4,511 40
Cemetery Department	179 37
"City Record"	6,365 68
Common Council, Contingent Fund	55 08
Congress-street Grade Crossing	355 16
Election Department	16,621 92
Engineering Department	630 04
Fire Department	1,289 28
Health Department	3,504 03
Hospital Department	3,936 54

Institutions:

Pauper Institutions Trustees —

Boston Almshouse and Hospital, Long Island	407 01
Charlestown Almshouse	21 33
Office Expenses	130 34

Penal Institutions Trustees —

House of Correction, South Boston	53 77
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<i>Carried forward</i>	\$56,273 91	\$43,619 41
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<i>Brought forward</i>	\$56,273 91	\$43,619 41
Deer Island	106 48	
Office Expenses	76 44	
Trustees for Children —		
Parental School	17 49	
House of Reformation, Rainsford		
Island	64 93	
Marcella-street Home	31 16	
Placing Out and Office Expenses,	97 37	
Insane Hospital Trustees —		
Austin Farm	216 47	
Pierce Farm	36 47	
Institutions Registration	165 42	
Lamp Department	313 21	
Law Department	317 82	
Law Incidentals	70 63	
Library Department	936 40	
Laying-Out and Construction of High-		
ways	261 26	
Market Department	26 61	
Mayor's Department	794 39	
Music Department	800 22	
Municipal Statistics Department	1,286 01	
Overseeing of the Poor	175 10	
Park Department	674 58	
Public Parks	818 17	
Strandway	35 94	
Police Department	3,167 42	
Police Signal Service	362 97	
Liquor License	1,110 51	
House of Detention	43 29	
Public Celebrations	462 08	
Public Buildings	321 60	
Schools	176 44	
Ward-rooms	11 00	
Electrical Construction Division	145 78	
Repairs Division	172 47	
Public Grounds	57 56	
Registry Department	1,491 68	
Restoration Faneuil Hall	53 03	
Rapid Transit	13 09	
Soldiers' Relief	199 34	
Schools	535 85	
Sinking Fund	234 96	
Sealing of Weights and Measures	174 07	
South Union Station	137 13	
Street Laying-Out Department	163 49	
Street Laying-Out and Construction of		
Highways	259 43	
<i>Carried forward</i>	\$72,889 67	\$43,619 41

<i>Brought forward</i>	.	.	.	\$72,889 67	\$43,619 41
Street Sewerage Works	.	.	.	1,532 27	
Street Department :					
Central Office	.	.	.	314 85	
Paving Division	.	.	.	3,253 18	
Bridge Division	.	.	.	363 50	
Sanitary Division	.	.	.	1,342 43	
Street Cleaning Division	.	.	.	642 06	
Watering Division	.	.	.	374 82	
Ferry Division	.	.	.	853 59	
New Ferry Landing	.	.	.	410 70	
Cambridge Bridge	.	.	.	45 11	
Sewer Division	.	.	.	1,769 46	
Sewer Assessment	.	.	.	257 23	
Treasury Department	.	.	.	460 63	
Wire Department	.	.	.	499 84	
Wayfarers' Lodge	.	.	.	50 91	
Water Department :					
Income Division	.	.	.	2,577 78	
Distribution Division	.	.	.	1,294 54	
Commissioner's Office	.	.	.	467 60	
Engineer	.	.	.	161 03	
Deacon and Waste System	.	.	.	140 80	
County of Suffolk :					
Superior Civil Court	.	.	.	4,533 12	
Superior Criminal Court	.	.	.	949 32	
Treasurer	.	.	.	68 24	
Registry of Deeds	.	.	.	513 00	
Court of Registration	.	.	.	102 35	
Probate Court	.	.	.	8 75	
Jail	.	.	.	5 05	
North District Medical Examiner	.	.	.	98 31	
Municipal Court, Brighton	.	.	.	105 05	
Municipal Court, Roxbury	.	.	.	263 77	
Municipal Court, West Roxbury	.	.	.	127 66	
Municipal Court, South Boston	.	.	.	289 32	
Municipal Court, Dorchester	.	.	.	8 00	
Municipal Court, East Boston	.	.	.	88 13	
					96,862 07
Revenue from rents uncollected February 1, 1898,					316 66
Rents from sub-tenants :					
J. W. Cook & Son, from February					
1, 1898, to December 1, 1898, 10					
months, @ \$83.33	.	.	.	\$833 30	
Esteý Organ Company, from Feb-					
ruary 1, 1898, to May 1, 1898, 3					
months, @ \$75	.	.	.	225 00	
<i>Carried forward</i>	.	.	.	\$1,058 30	\$140,798 14

<i>Brought forward</i>	\$1,058 30	\$140,798 14
"City Record," from January 1, 1898, to December 1, 1898, 11 months, @ \$15	165 00	
Gilbert N. Ware, November	75 00	
		1,298 30
Revenue from heating, uncollected February 1, 1898,		30 41
Heating:		
Pitts, Kimball & Lewis, March, 1898	\$66 33	
Pitts, Kimball & Lewis, October 1 to November 15, 1898	87 50	
		153 83
Estate of James Parker, second, third and sixth floors for January, February, March, April, October and November, 6 months, @ \$107, ...	\$642 00	
Estate of James Parker, fourth and fifth floors for January, February, March, April, October and No- vember, six months, @ \$86	516 00	
		1,158 00
Steam power:		
Estate of James Parker, 611 Washington street, running passenger and freight elevators, Jan- uary 1, 1898, to December 1, 11 months, @ \$83.33		916 63
		<u>\$144,355 31</u>

EXPENDITURES OF PRINTING DEPARTMENT PAID FROM FEBRUARY
1, 1898, TO JANUARY 31, 1899.

Printing Plant.

Accounts unpaid January 31, 1898	\$7,422 23
Pay-roll:	
Week ending	
February 3 . \$1,350 60	
" 10 . 1,385 47	
" 17 . 1,407 41	
" 24 . 1,303 56	
	\$5,447 04
March 3 . \$1,338 28	
" 10 . 1,339 94	
" 17 . 1,261 93	
" 24 . 1,272 83	
" 31 . 1,276 94	
	6,489 92
<i>Carried forward</i>	\$11,936 96
	\$7,422 23

<i>Brought forward,</i>		\$11,936 96	\$7,422 23
April	7 . .	\$1,065 88	
"	14 . .	1,234 68	
"	21 . .	1,214 81	
"	28 . .	1,350 77	
			4,866 14
May	5 . .	\$1,368 36	
"	12 . .	1,398 15	
"	19 . .	1,423 91	
"	26 . .	1,595 77	
			5,786 19
June	2 . .	\$1,734 08	
"	9 . .	2,021 66	
"	16 . .	2,167 43	
"	23 . .	2,173 90	
"	30 . .	1,828 97	
			9,926 04
July	7 . .	\$1,521 48	
"	14 . .	1,616 97	
"	21 . .	1,588 11	
"	28 . .	1,606 44	
			6,333 00
August	4 . .	\$2,027 51	
"	11 . .	2,382 89	
"	18 . .	2,275 89	
"	25 . .	1,527 88	
			8,214 17
September	1 . .	\$1,529 55	
"	8 . .	1,371 23	
"	15 . .	1,120 11	
"	22 . .	1,127 14	
"	29 . .	1,263 03	
			6,411 06
October	6 . .	\$1,403 15	
"	13 . .	1,445 58	
"	20 . .	1,363 52	
"	27 . .	1,601 18	
			5,813 43
November	3 . .	\$1,495 07	
"	10 . .	1,304 09	
"	17 . .	1,463 46	
"	24 . .	1,299 61	
			5,562 23
December	1 . .	\$1,230 89	
"	8 . .	1,243 85	
"	15 . .	1,265 33	
"	22 . .	1,256 38	
"	29 . .	1,335 98	
			6,332 43
<i>Carried forward,</i>		\$71,181 65	\$7,422 23

<i>Brought forward</i> , \$71,181 65			\$7,422 23
January 5	1,526 04		
Extra pay-roll for overtime . 296 50			
Total pay-roll		\$73,004 19	
Binding, ruling, numbering and perforating :			
February	\$1,228 52		
March	2,605 51		
April	1,483 81		
May	1,012 35		
June	979 55		
July	2,850 00		
August	1,516 94		
September	634 90		
		12,311 58	
Paper stock :			
February	\$1,377 65		
March	1,091 71		
April	1,063 65		
May	1,266 26		
June	1,391 04		
July	2,182 02		
August	835 02		
September	1,034 93		
October	224 65		
November	141 75		
		10,608 68	
Rent :			
February 1 to October 1,			
8 months, at \$371.67, \$2,973 36			
Water-rates and repairs, 236 20			
		3,209 56	
Lithographing and engraving :			
February	\$176 30		
March	259 45		
April	480 00		
May	238 80		
June	133 53		
July	15 75		
August	165 00		
September	440 50		
October	40 00		
		1,949 33	
Fuel :			
February	\$208 80		
March	167 04		
April	107 92		
<i>Carried forward</i>	\$483 76	\$101,083 34	\$7,422 23

<i>Brought forward</i> .	\$483 76	\$101,083 34	\$7,422 23
May	82 80		
June	82 80		
July	50 04		
August	68 22		
September	66 72		
		834 34	
Insurance	. .	738 00	
Miscellaneous expenses .	. .	675 37	

Electrotyping :

February	\$14 27		
March	178 85		
April	26 60		
May	46 05		
June	17 82		
July	98 71		
August	45 86		
September	124 20		
		552 36	
Pocket edition of Rules and Orders for City Council		540 00	

Stationery :

February	\$81 09		
March	106 30		
April	13 70		
May	55 34		
June	22 26		
July	18 90		
August	17 25		
September	26 43		
		341 27	
Postage bought at stationers		295 00	

Lighting :

February	\$45 47		
March	45 20		
April	34 85		
May	40 23		
June	31 58		
July	33 61		
August	29 19		
September	32 97		
		293 10	
Expense of moving office	. .	250 00	

<i>Carried forward</i>	\$105,602 78	\$7,422 23
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<i>Brought forward</i>		\$105,602 78	\$7,422 23
Ink :			
February	\$43 78		
March	15 80		
April	15 00		
May	22 50		
June	20 26		
July	25 00		
August	15 00		
September	50 00		
		207 34	
Telephone service		197 71	
Water-rates :			
March	\$33 20		
April	50 10		
June	57 60		
September	38 40		
		179 30	
Repairs on presses.		161 60	
Car tickets		160 00	
Outside printing		156 85	
Rollers for presses :			
February	\$35 49		
March	4 80		
May	28 80		
June	41 60		
July	60		
August	27 92		
		139 21	
Washing towels and cleaning offices,		121 50	
Press-room supplies		69 84	
Oil for engine		69 50	
Heating rebate for vacant offices		64 35	
Teaming		57 13	
Time clock expenses		53 40	
Oil and benzine		52 95	
Telephone repairs		35 57	
Messenger service		6 80	
Drafts, for postage for sale to de-			
partments :			
Postage billed direct to			
departments	\$4,433 06		
Postage printing office,	136 90		
Government envelopes			
and postals printed			
for departments	2,911 54		
Stamps on hand, Feb. 1,			
1899	18 50		
		7,500 00	
<i>Carried forward</i>		\$114,835 83	\$7,422 23

Brought forward . . . \$114,835 83 \$7,422 23

Cost of Printing Plant.

Presses . . . \$3,000 00

Type :

February . \$180 27

March . 1,080 99

April . 214 85

May . 69 25

June . 30 64

July . 356 30

August . 348 80

September . 15 89

2,296 99

Repairs . . . 1,464 84

Office furniture . . . 680 50

7,442 33

122,278 16

Total . . . \$129,700 39

Balance unexpended January 31, 1899 . . . 14,654 92

\$144,355 31

STATEMENT OF OPERATION OF PRINTING PLANT FROM FEBRUARY 1,
1898, TO FEBRUARY 1, 1899, INCLUDING REVENUE UNCOL-
LECTED AND EXPENDITURES NOT PAID.

Operation of Printing Plant.

Revenue from printing as shown on page 7 . . . \$96,862 07

Uncollected revenue for printing to February 1,
1899, as follows :

Assessing Department . . . \$96 14

Auditing Department . . . 22 13

Civil Service Division . . . 10 00

Building Department . . . 1,368 88

Bath Department . . . 245 26

Board of Aldermen, Contingent Fund, . 203 13

Collecting Department . . . 1,329 73

City Messenger Department . . . 511 84

City Clerk's Department . . . 124 16

Cemetery Department . . . 221 12

Clerk of Committees Department . . . 92 79

Common Council, Contingent Fund . . . 18 41

City Council, Incidental Expenses . . . 655 85

City Council Proceedings . . . 9 00

"City Record" . . . 974 34

Congress-street Grade Crossing . . . 70 63

Carried forward . . . \$5,953 41 \$96,862 07

<i>Brought forward</i>	\$5,953 41	\$96,862 07
Election Department	215 13	
Engineering Department	67 89	
Fire Department	357 33	
Franklin Fund	79 14	
Hospital Department	932 17	
Health Department	1,267 56	
Institutions Departments :		
Pauper Institutions Trustees :		
Boston Almshouse and Hospital,		
Long Island	12 37	
Office Expenses	156 86	
Penal Institutions Trustees :		
House of Correction, South Boston,	34 08	
Deer Island	74 90	
Office Expenses	131 08	
Trustees for Children :		
House of Reformation, Rainsford		
Island	24 37	
Placing-Out and Office Expenses .	122 19	
Insane Hospital Trustees :		
Austin Farm	141 29	
Pierce Farm	109 25	
Institution Registration	32 23	
Library Department	13 07	
Laying-Out and Construction of High-		
ways	99 04	
Lamp Department	185 85	
Law Department	38 14	
Law Incidentals	11 83	
Music Department	246 40	
Mayor's Department	562 78	
Municipal Statistics Department .	38 92	
Municipal Free Lectures	195 03	
Overseers of the Poor	349 05	
Police Department	1,096 93	
Liquor License	836 62	
Police Signal Service	78 59	
House of Detention	13 46	
Penal Aspect of Drunkenness . . .	18 21	
Park Department	489 31	
Public Parks	36 40	
Public Buildings	194 66	
Repairs Division	414 34	
Electrical Construction	157 51	
School-houses	133 25	
Ward-rooms	3 72	
Registry Department	431 44	
<i>Carried forward</i>	\$15,355 80	\$96,862 07

<i>Brought forward</i>	\$15,355 80	\$96,862 07
Sewer Assessment	322 55	
Street Laying-Out Department	53 41	
Street Department:		
Bridge Division	161 68	
Street Cleaning Division	189 24	
Sanitary Division	1,127 05	
Sewer Division	226 10	
Paving Division	632 96	
Ferry Division	258 67	
Watering Division	10 00	
Cambridge Bridge	16 77	
Central Office	69 71	
Sewerage Works	112 93	
Sinking Fund	12 75	
Soldiers' Relief Department	216 38	
Sealing of Weights and Measures Department	24 80	
Schools	1,039 26	
Treasury Department	143 03	
Water Department:		
Income Division	429 20	
Distribution Division	674 90	
Engineering Division	49 00	
Deacon and Waste System	1 40	
Commissioner's office	459 58	
Wire Department	300 33	
County of Suffolk:		
Superior Civil Court	1,463 33	
Superior Criminal Court	176 53	
Court of Registration	120 30	
Superior Court	4 25	
Probate Court	42 68	
Municipal Court, Dorchester	9 92	
Municipal Court, Charlestown	108 77	
Municipal Court, South Boston	122 15	
Municipal Court, West Roxbury	4 68	
Municipal Court, Roxbury	127 41	
		24,067 52

*Printing of Documents, etc., Charged to the
Printing Appropriation.*

No. of Copies.	Doc. No.		
3,600	3,	Auditor's Annual Reports,	
	1897		\$2,725 70
2,000	39,	Municipal Register, 1898	2,221 50
1,000		Copies each, 13 lots, Auditor's	
		Monthly Exhibit	1,334 25

Carried forward \$6,281 45 \$120,929 59

<i>Brought forward</i> . . .		\$6,281 45	\$120,929 59
No. of Copies.	Doc. No.		
900	34, Annual Reports, Street Department, 1897 . . .	1,198 90	
2,000	Twenty-eighth Report, Record Commissioner . . .	900 40	
900	15, Annual Reports Hospital, 1897, . . .	830 14	
5,600	Fourth of July Oration . . .	796 06	
900	37, Annual Reports of Water Department, 1897 . . .	790 70	
400	Special Acts relative to City of Boston . . .	740 33	
250	Copies each, 50 lots, Common Council Calendars . . .	695 58	
900	21, Annual Reports, Library, 1897, . . .	530 07	
900	12, Annual Reports, Engineering, 1897 . . .	529 20	
2,500	27, Annual Reports, Printing, 1897 . . .	402 29	
900	14, Annual Reports Health, 1897, . . .	356 53	
600	Copies each, 12 lots, Collector's Monthly Statement . . .	319 01	
100	Copies each, 45 lots, Aldermen's Order of Business . . .	307 17	
600	42, Annual Estimates, 1899-1900, . . .	289 11	
900	24, Annual Reports, Park Department, 1897 . . .	286 00	
900	26, Annual Reports, Penal Institutions Department, 1897 . . .	264 67	
900	11, Annual Reports of Election Department, 1897 . . .	241 63	
600	Copies each, 12 lots, Treasurer's Monthly Statement . . .	227 24	
900	36, Annual Reports of Treasurer, 1897 . . .	214 67	
1,200	48, Annual Estimates, 1898-1899, . . .	206 41	
900	10, Annual Reports of Collecting Department, 1897 . . .	194 16	
1,200	Organization of City Government . . .	181 64	
900	4, Annual Reports of Building Department, 1897 . . .	172 63	
600	53, Jury Lists . . .	163 52	
900	28, Annual Reports, Public Buildings, 1897 . . .	156 01	
900	38, Annual Reports, Wire Department, 1897 . . .	137 51	
900	35, Annual Reports, Street Laying-Out Department, 1897, . . .	134 34	

Carried forward . . . \$17,547 37 \$120,929 59

<i>Brought forward</i> . . .		\$17,547 37	\$120,929 59
No. of Copies.	Doc. No.		
800	2, Annual Reports, Assessing Department, 1897 . . .	133 48	
900	25, Annual Reports, Pauper In- stitutions Department, 1897, . . .	124 96	
900	6, Annual Reports, Children's In- stitutions Department, 1897, . . .	112 87	
900	16, Annual Reports, Insane Hos- pital, 1897	102 03	
600	46, Investigation of Discharges . . .	100 70	
600	117, Copies Public Electric Light- ing (message of Mayor transmitting a copy of an agreement for the extension of the existing contract be- tween the Boston Electric Light Company and the city) . . .	88 48	
900	30, Annual Reports, Registry, 1897	87 55	
600	73, Loan Estimates of Depart- ments	75 94	
900	5, Annual Reports, Cemetery, 1897	75 77	
600	147, Franklin Fund, hearing before Board of Managers, No- vember 14, 1898	72 04	
900	13, Annual Reports, Fire Depart- ment, 1897	57 87	
600	154, Claims, report of Committee on Claims submitting a list of claims acted upon during the year	54 12	
600	19, Annual Reports, Lamp De- partment, 1897	53 89	
1,000	Indexes, City Documents	49 99	
900	23, Annual Reports, Overseeing of the Poor, 1897	47 04	
900	29, Annual Reports, Public Grounds Department, 1897, . . .	39 69	
900	33, Annual Reports, Statistics De- partment, 1897.	38 46	
900	32, Annual Reports, Sinking Funds, 1897	38 32	
600	144, Municipal camp for boys at Long Island (message of the Mayor transmitting re- port on the conduct and management)	36 73	
<i>Carried forward</i>		\$18,937 30	\$120,929 59

		<i>Brought forward</i> . . .		\$18,937 30	\$120,929 59
No. of Copies.	Doc. No.				
600		Indexes to City Documents .	36	04	
600	142,	Randidge Picnic Excursions (message of the Mayor transmitting report on the conduct and management),	27	31	
600	44,	Rules and Orders of the Board of Aldermen, report of Special Committee, Febru- ary 7, 1898	23	76	
600		Indexes to City Documents .	23	68	
600	88,	Orders establishing the several appropriations and levying a specific tax for the finan- cial year ending January 31, 1899	21	30	
600	156,	Report, Inspectors of Prisons,	20	99	
600	61,	Appropriation bill for the city and county for 1898-99, report of the Joint Stand- ing Committee on Appro- priations, March 28, 1898,	20	10	
900	31,	Annual Reports, Sealing of Weights and Measures, 1897	19	06	
600	126,	Inspection of Prisons, Suf- folk County (first semi- annual report)	18	74	
600	155,	Building Limits, report of Committee on Building De- partment, with ordinance relative to	16	62	
600		Rules, Common Council . .	16	39	
600	67,	Constables, appointed for one year beginning May 1, 1898,	15	17	
600	103,	Orders establishing the several appropriations and levying a specific tax for the finan- cial year ending January 31, 1899	14	69	
600	97,	Examination of accounts of City and County Treasurer,	14	53	
600	135,	Real estate taken by the Bos- ton Terminal Company (mes- sage from the Mayor trans- mitting communication from the Street Commissioners relative to)	13	92	
<i>Carried forward</i>				\$19,239 60	\$120,929 59

<i>Brought forward</i> . . .		\$19,239 60	\$120,929 59
No. of Copies.	Doc. No.		
600		Joint Rules	13 69
900	17,	Annual Reports, Institutions Registration Department, 1897	13 65
900	8,	Annual Reports, City Messen- ger, 1897	13 10
600	138,	Disposition of the Franklin Fund (message of the Mayor relative to)	13 05
30		Blank Schedules, City Docu- ment, 1898	12 08
600	155,	Building Limits, report of Com- mittee on Buildings Depart- ment, with ordinance rela- tive to	11 54
600	145,	Contract for Gas, message of the Mayor transmitting com- munication from the Presi- dent of the Brookline Gas Company relative to	11 29
600	56,	Subway and Tunnel, East Boston, message of the Mayor transmitting com- munication from the Boston Transit Commission relative to progress of work, Febru- ary 10, 1898	10 97
600	44,	Rules and Orders of the Board of Aldermen	10 70
600	78,	Loan of \$652,000 for various municipal purposes, report of Committee on Finance	10 29
200	31,	Extra Annual Reports, Sealer of Weights and Measures	9 30
900	7,	Annual Reports, City Clerk, 1897	8 73
600	48,	Appropriation and Tax Orders for 1898-99, together with Annual Estimates of de- partments, message of the Mayor recommending, March 14, 1898	8 14
600	75,	Employees in City Hospital, message of the Mayor trans- mitting communication from the Trustees relative to, April 21, 1898	8 04
<i>Carried forward</i>		\$19,394 17	\$120,929 59

<i>Brought forward</i> . . .		\$19,394 17	\$120,929 59
No. of Copies.	Doc. No.		
600 164,	Closing Proceedings of the Common Council of 1898 .	7 62	
600 162,	West End Street Railway Com- pany, 161st Location .	7 29	
600 115,	West End Street Railway Com- pany, 148th Location .	7 26	
600 49,	Cross-street extension, mes- sage of the Mayor transmit- ting communication from Street Commissioners, sub- mitting a list of the prop- erty owners, and the as- sessed valuation of the property affected, January 27, 1898	6 90	
600 46,	Borrowing capacity of the city during the present municipal year, message of the Mayor transmitting communication from Board of Sinking- Funds Commissioners, giv- ing estimate, January 6, 1898	6 68	
900 22,	Annual Reports of Market, 1897	6 63	
600 85,	West End Street Railway Com- pany, 134th, 135th, 136th, 137th Locations . . .	6 54	
600 124,	Loan Appropriations for Street Improvements, message of the Mayor transmitting communication from the Superintendent of Streets relative to	6 54	
600 68,	Appointments by the Mayor, April 11, 1898	6 54	
600 98,	West End Street Railway Com- pany, 141st Location .	6 29	
600 152,	West End Street Railway Com- pany 158th Location . .	6 29	
600 107,	Summer Camp for Boys at Long Island, message of the Mayor relative to . . .	6 04	
600 149,	Sale of Reservoir and land in Brookline, message of the Mayor relative to . . .	6 04	
600 129,	West End Street Railway Com- pany, 153d Location . .	5 79	
<i>Carried forward</i> . . .		\$19,486 62	\$120,929 59

<i>Brought forward</i>		\$19,486 62	\$120,929 59
No. of Copies.	Doc. No.		
600	130,	West End Street Railway Company, 154th Location	5 79
600		Closing Proceedings of Com- mon Council of 1897	5 59
600	99,	Quincy and Boston Street Railway Company, 2d Loca- tion	5 54
600	122,	West Roxbury and Newton Street Railway Company, 1st Location	5 54
200		Copies each, title-page, tables of contents, Executive Documents	5 39
1,100	18,	Annual Reports Inspection of Vessels and Ballast	5 22
600	40,	Ward 23, Changes in Precinct Boundaries, March 14, 1898, ...	5 04
600	69,	Ward 7, Changes in Precinct Boundaries Precincts 1 and 6	4 23
600	70,	West End Street Railway Com- pany, 131st Location	4 23
600	51,	Bath Department, Ordinance for the establishment of de- partment, chapter 1, Ordi- nances of 1898	4 16
600	54,	"City Record," Ordinance con- cerning establishment, chap- ter 2, Ordinances of 1898	4 01
600	151,	West End Street Railway Com- pany, 157th Location	3 73
600	87,	West End Street Railway Com- pany, 138th Location	3 73
600	42,	Baths, message of the Mayor, recommending passage of Ordinance for a new depart- ment of	3 69
600	76,	Public Music, Ordinance con- cerning the establishment of a department, chapter 5, Ordinances of 1898	3 65
600	77,	Public Landing outside the Strandway, message of the Mayor transmitting com- munication from the Board of Park Commissioners rela- tive to construction and maintenance	3 61
<i>Carried forward</i>		\$19,559 77	\$120,929 59

<i>Brought forward</i> . . .		\$19,559 77	\$120,929 59
No. of Copies.	Doc. No.		
600	83, West End Street Railway Com- pany, 132d Location . . .	3 61	
600	108, West End Street Railway Com- pany, 144th Location . . .	3 61	
600	41, Disposition of sums to be re- ceived by the city in com- pensation for taking its water-supply system, Janu- ary 6, 1898 . . .	3 59	
600	65, Erection of Wooden Buildings outside the building limits, chapter 4, Ordinances of 1898 . . .	3 48	
600	90, West End Street Railway Com- pany, 140th Location . . .	3 48	
600	94, Public Baths. Ordinances of 1898, chapter 7 . . .	3 48	
600	82, Norfolk Suburban Street Rail- way Company, 6th Location, . . .	3 36	
600	134, Boston & Albany Railroad Company, taking of land, Irvington street, report of Committee on Railroads, with order prescribing limits within which company may take land, etc. . . .	3 36	
600	89, West End Street Railway Com- pany, 139th Location . . .	3 23	
600	102, West End Street Railway Com- pany, 143d Location . . .	3 23	
600	113, West End Street Railway Com- pany, 147th Location . . .	3 23	
600	128, West End Street Railway Company, 152d Location, . . .	3 23	
600	140, West End Street Railway Company, 156th Location, . . .	3 23	
600	139, West End Street Railway Company, 155th Location, . . .	3 23	
600	159, West End Street Railway Company, 160th Location, . . .	3 23	
600	47, Auditor's Monthly Exhibit, general and special appro- priations for 1897-98 . . .	3 23	
600	101, West End Street Railway Company, 142d Location . . .	3 22	
600	109, West End Street Railway Company, 145th Location, . . .	3 16	
<i>Carried forward</i> . . .		\$19,619 96	\$120,929 59

<i>Brought forward</i> . . .		\$19,619 96	\$120,929 59
No. of Copies.	Doc. No.		
300	Resolves against certain bills by Legislature . . .	3	13
600	60, Department of Public Music, ordinance to amend Re- vised Ordinances of 1892, providing for, March 24, 1898 . . .	3	11
600	86, Memorial Day Appropriations, report and order making .	3	11
600	92, Loan of \$52,000, for certain City Departments, orders authorizing . . .	3	11
600	100, Bath Department, chapter 8, Ordinances of 1898, con- cerning . . .	3	11
600	112, West End Street Railway Company, 146th Location,	3	11
600	123, West End Street Railway Company, 150th Location,	3	11
600	74, Borrowing of \$1,000,000, under the Sewer Assess- ment Act, message of the Mayor recommending pas- sage of the order, April 18, 1898 . . .	2	98
600	84, West End Street Railway Company, 133d Location,	2	98
600	125, Free Carriage Rides for Sol- diers, message of the Mayor vetoing orders for . . .	2	98
600	141, Drinking Fountains, chapter 1, Ordinances of 1898, concerning . . .	2	98
600	158, West End Street Railway Company, 159th Location,	2	98
600	127, West End Street Railway Company, 151st Location,	2	97
600	114, Boston Elevated Railway Com- pany, 2d Location . . .	2	86
600	64, Employees in City Depart- ments, chapter 3, Ordi- nances of 1898 . . .	2	73
600	91, Annual Reports of the Execu- tive Department, chapter 6, Ordinances of 1898 .	2	73
600	121, West End Street Railway Company, 149th Location,	2	73
<i>Carried forward</i> . . .		\$19,670 67	\$120,929 59

<i>Brought forward</i> . . .		\$19,670 67	\$120,929 59
No. of Copies.			
75	Resolves against House Bill 553 .	2 68	
750	Resolves against Legislature unless it be accepted by City Council .	2 62	
100	Half Title, Address of Mayor .	2 58	
100	Half Title, Auditor's Report .	2 58	
Binding Executive Documents \$1,711 50			
Printing Department, Office			
	Expenses	968 58	
Printing, Clerk of Common			
	Council	41 18	
Binding, Common Council .		2 75	
		2,724 01	22,405 14
Stock on hand, February 1, 1899, including un-			
finished work			4,375 91
Rents from sub-tenants. (<i>See</i> page 8)			1,298 30
Rents of sub-tenants not paid February 1, 1898:			
Gilbert N. Ware, December and Jan-			
	uary	\$150 00	
J. W. Cook & Son, December and			
	January	166 66	
"City Record," December and Jan-			
	uary	30 00	
			346 66
Power and heat furnished. (<i>See</i> page 8) .			2,228 46
Power and heat not paid February 1,			
1898 —			
Steam heat:			
Parker estate, 611 Washington			
	street, December and January,	\$386 00	
Steam power:			
Running passenger and freight			
	elevators, Parker estate, 611		
	Washington street, December		
	and January	166 66	
			552 66
Total			
			<u>\$152,136 72</u>

EXPENSES OF OPERATION OF PRINTING PLANT.

Expenditures paid up to January 31, 1898. (*See*
page 12) \$114,835 83

Pay-roll:

Week ending January 12 . . .	\$1,292 74	
January 19 . . .	1,290 58	
January 26 . . .	1,333 09	
January 26 to February 1 . . .	911 50	
Extra pay-roll, overtime . . .	192 77	
		5,020 68

Binding:

October	\$1,846 57	
November	1,589 27	
December	2,534 60	
January	1,401 24	
		7,371 68

Paper stock:

October	\$927 55	
November	895 13	
December	1,238 40	
January	2,322 46	
		5,383 54

Rent from October 1 to February 1,
4 months, at \$371.67

1,486 68

Stationery:

October	\$495 00	
November	55 26	
December	83 26	
January	102 08	
		735 60

Fuel:

October	\$49 50	
November	21 26	
December	280 84	
January	152 03	
		503 63

Engraving and Lithographing:

October	\$4 50	
November	206 65	
December	25 00	
January	68 50	
		304 65

Lighting:

October	\$70 70	
November	77 78	
December	59 56	
January	95 58	
		303 62

Carried forward \$135,945 91

<i>Brought forward</i>					\$135,495 91
Postage bought at stationers					265 44
Electrotyping :					
October	.	.	.	.	\$25 93
November	.	.	.	.	16 66
December	.	.	.	.	132 32
January	.	.	.	.	17 19
					192 10
Press-room supplies	.	.	.	.	\$133 29
Outside printing	.	.	.	.	95 00
Car tickets	.	.	.	.	90 00
Rollers for presses	.	.	.	.	78 20
Repairs, presses	.	.	.	.	75 75
Ink	.	.	.	.	65 20
Washing towels	.	.	.	.	50 40
Water-rates	.	.	.	.	41 00
Repairs, elevator	.	.	.	.	39 55
Teaming	.	.	.	.	30 86
Oil and benzine	.	.	.	.	24 20
Repairs, boiler	.	.	.	.	20 00
Time-clock expense	.	.	.	.	19 15
Telephone	.	.	.	.	17 10
Messenger service	.	.	.	.	8 70
Postage paid for in 1899, draft	.	.	.	.	776 00
					1,564 40
Total	.	.	.	.	\$137,967 85

COST OF PLANT FEBRUARY 1, 1899.

Cost paid January 31, 1899. (<i>See</i> page 13)		\$7,442 33
Presses :		
December	.	\$2,200 00
January	.	2,200 00
		\$4,400 00
Repairs	.	430 09
Type :		
October	.	\$57 76
November	.	80 98
December	.	57 24
January	.	90 50
		286 48
		5,116 57
		\$12,558 90
		CREDIT.
Presses sold	.	1,700 00
Total	.	\$10,858 90

PLANT.

Total cost of Plant, February 1, 1898	\$42,031 03
Addition to Plant from February 1, 1898, to February 1, 1899. (<i>See</i> page 26)	12,558 90
	\$54,589 93

CREDIT.

Presses sold	1,700 00
	\$52,889 93

RESERVE FOR DEPRECIATION ON PLANT.

10 per cent. in 1897	\$4,203 10
10 per cent. in 1898	3,782 79
	\$7,985 89

Actual value of Plant	\$44,904 04
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Total operation of Printing Plant. (<i>See</i> page 24)	\$152,136 72
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Total operating expenses of Printing Plant. (<i>See</i> page 26)	137,967 85

\$14,168 87

Deduct depreciation on Plant at rate of 10 per cent. per annum	3,782 79

\$10,386 08

PRINTING AND STATIONERY EXPENDITURES, 1898.

Tables on the following pages show the cost of printing, stock, stationery and binding, supplied to the different departments of the city government, the courts of the County of Suffolk and other appropriations enumerated and paid for by the same, outside of the City of Boston Printing Plant.

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
Assessing Department				\$2,057 83	.....	\$2,057 83
Auditing Department.....				1,069 06	.....	1,069 06
Civil Service.....				42 15	.....	42 15
County of Suffolk				12 75	.....	12 75
Bath Department.....				294 20	.....	294 20
Board of Aldermen, Contingent Expenses.....		\$151 50	.....	78 30	.....	229 80
Building Department				241 03	.....	241 03
Board of Examiners, Plumbers.....	\$3 25	.....	.....	.....	.....	3 25
Cemetery Department.....				118 91	.....	118 91
<i>Carried forward</i>	\$3 25	\$151 50	.....	\$3,914 23	.....	\$4,068 98

PRINTING DEPARTMENT.

29

PRINTING AND STATIONERY EXPENDITURES, 1898. — *Continued.*

	Printing done by Rockwell & Churchill.	Photo, Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$3 25	\$151 50	.....	\$3,914 23	.....	\$4,068 98
City Clerk .....	.....	.....	.....	1,557 52	.....	1,557 52
City Council, Incidental Expenses.....	762 99	1,450 00	.....	38 50	.....	2,251 49
City Messenger Department.....	.....	.....	.....	975 59	.....	975 59
Clerk of Committees Department.....	.....	.....	.....	547 54	.....	547 54
Collecting Department.....	.....	57 40	.....	1,366 06	.....	1,423 46
City Record .....	.....	56 65	.....	58 85	.....	115 50
Contingent Expenses, Common Council.....	.....	.....	.....	53 50	.....	53 50
Election Department.....	3,847 75	8 80	.....	975 30	.....	4,831 85
Engineering Department:						
Architect.....	.....	.....	\$2 56	179 55	.....	182 11
<i>Carried forward</i>	\$4,613 99	\$1,724 35	\$2 56	\$9,666 64	.....	\$16,007 54

PRINTING AND STATIONERY EXPENDITURES, 1898 — *Continued.*

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$4,613 99	\$1,724 35	\$2 56	\$9,666 64	.....	\$16,007 54
Engineering Department — <i>Continued.</i>						
Surveying.....	.....	.....	.....	355 25	.....	355 25
Congress-street Grade Crossing.....	.....	.....	.....	4 50	.....	4 50
Dorchester-avenue Grade Crossing.....	.....	.....	.....	7 50	.....	7 50
Cambridge Bridge.....	.....	.....	.....	32 63	.....	32 63
Department Expenses .....	.....	7 50	7 79	526 03	.....	541 32
Charlestown Bridge.....	.....	.....	.....	85	.....	85
Fire Department .....	.....	.....	.....	198 18	.....	198 18
Health Department.....	.....	495 00	.....	818 32	.....	1,313 32
Hospital Department .....	.....	104 25	.....	1,184 79	\$2 00	1,291 04
<i>Carried forward</i>	\$4,613 99	\$2,331 10	\$10 35	\$12,704 69	\$2 00	\$19,752 13

PRINTING AND STATIONERY EXPENDITURES, 1898—Continued.

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$4,613 99	\$2,331 10	\$10 35	\$12,794 69	\$2 00	\$19,752 13
Institutions Department:						
Department Expenses.....	17 50	.....	.....	.....	.....	17 50
Pauper, Long Island.....	.....	.....	.....	61 90	.....	61 90
“ Children.....	.....	.....	4 60	20 00	.....	24 60
“ Office Expenses.....	.....	.....	21 03	81 68	.....	102 71
“ Rainsford Island.....	.....	.....	71 36	80	.....	72 16
House of Correction, Deer Island.....	.....	.....	.....	9 55	.....	9 55
House of Correction, South Boston.....	.....	.....	.....	1 50	.....	1 50
Insane Hospital, Austin Farm.....	5 75	.....	.....	43 50	.....	49 25
“ “ Pierce Farm.....	.....	.....	.....	43 04	.....	43 04
<i>Carried forward</i>	\$4,637 24	\$2,331 10	\$107 34	\$13,056 66	\$2 00	\$20,134 34

PRINTING AND STATIONERY EXPENDITURES, 1898—Continued.

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$4,637 24	\$2,331 10	\$107 34	\$13,056 66	\$2 00	\$20,134 34
Lamp Department.....	.....	.....	.....	44 83	.....	44 83
Law ".....	.....	.....	.....	212 71	.....	233 21
Library ".....	.....	20 50	.....	4 80	.....	4 80
Music ".....	.....	.....	.....	43 73	.....	43 73
Market ".....	.....	.....	.....	1 60	.....	1 60
Mayor ".....	.....	.....	.....	474 19	.....	474 19
Overseeing of the Poor Department.....	.....	.....	.....	245 51	.....	245 51
Park Department:						
Department Expenses.....	.....	.....	.....	155 05	.....	155 05
Public Parks.....	.....	.....	.....	175 43	.....	175 43
Strandway.....	.....	.....	.....	15 31	.....	15 31
<i>Carried forward</i>	\$4,637 24	\$2,351 60	\$107 34	\$14,429 82	\$2 00	\$21,528 00

PRINTING AND STATIONERY EXPENDITURES, 1898 — Continued.

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$4,637 24	\$2,351 60	\$107 34	\$14,429 82	\$2 00	\$21,528 00
Police Department:						
Department Expenses.....	.....	60 00	.....	1,270 17	.....	1,330 17
House of Detention.....	.....	.....	.....	4 75	.....	4 75
Liquor License .....	.....	.....	.....	279 16	.....	279 16
Police Signal System.....	.....	.....	.....	72 50	.....	72 50
Public Buildings Department:						
Department Expenses.....	.....	.....	.....	290 68	.....	290 68
Architect Division.....	.....	1 63	.....	.....	.....	1 63
Electrical Construction Division.....	.....	.....	.....	238 00	72 00	310 00
Repair Division.....	.....	.....	.....	362 44	.....	362 44
Schools.....	.....	.....	.....	93 40	.....	93 40
<i>Carried forward</i>	\$4,637 24	\$2,413 23	\$107 34	\$17,040 92	\$74 00	\$24,272 73

PRINTING AND STATIONERY EXPENDITURES, 1898 — *Continued.*

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$4,637 24	\$2,413 23	\$107 34	\$17,040 92	\$74 00	\$24,272 73
Public Grounds Department.....	.....	.....	.....	57 57	.....	57 57
Registry Department.....	1,291 04	.....	.....	89 68	.....	1,380 72
School Committee:						
Department Expenses.....	4,338 16	.....	.....	.....	.....	4,338 16
School-houses, Dorchester High.....	78 24	.....	.....	.....	.....	78 24
" Bowditch.....	39 43	.....	.....	.....	.....	39 43
" East Boston High.....	146 60	.....	.....	.....	.....	146 60
" West Roxbury High.....	175 43	.....	.....	.....	.....	175 43
Statistics.....	.....	3 75	.....	97 68	.....	101 43
Sealing of Weights and Measures Department.....	.....	.....	.....	96 34	.....	96 34
<i>Carried forward</i>	\$10,706 14	\$2,416 98	\$107 34	\$17,382 19	\$74 00	\$30,686 65

PRINTING AND STATIONERY EXPENDITURES, 1898—Continued.

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$10,706 14	\$2,416 98	\$107 34	\$17,382 19	\$74 00	\$30,686 65
Sinking Fund Department.....	.....	12 00	.....	9 75	.....	21 75
Soldiers' Relief .....	.....	.....	.....	64 91	.....	64 91
South Union Station .....	.....	.....	.....	7 51	.....	7 51
Street Department:						
Bridge Division .....	.....	.....	.....	192 73	.....	192 73
Central Office .....	.....	70 14	.....	358 91	1 00	430 05
Ferry Division .....	.....	.....	.....	291 85	.....	291 85
Paving Division:						
Department Expenses .....	.....	.....	.....	1,560 92	.....	1,560 92
<i>Carried forward</i>	\$10,706 14	\$2,499 12	\$107 34	\$19,868 77	\$75 00	\$33,256 37

PRINTING AND STATIONERY EXPENDITURES, 1898 — *Continued.*

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward.</i>	\$10,706 14	\$2,499 12	\$107 34	\$19,868 77	\$75 00	\$33,256 37
Street Department — <i>Continued.</i>						
Sanitary Division.....		10 25		705 11	45 19	760 55
Sewer Division:						
Department Expenses.....				2,050 55	53 50	2,104 05
Record Office.....				214 39	30 00	244 39
Laying-Out Sewer Assessment.....				133 35	216 00	349 35
Sewerage Works.....				1,499 76		1,499 76
Sewerage Works, Moon Island.....				7 35		7 35
Stony Brook Improvement.....				68 58		68 58
Street Cleaning Division.....				268 76		268 76
Street Watering Division.....				129 16		129 16
<i>Carried forward.</i>	\$10,706 14	\$2,509 37	\$107 34	\$24,945 78	\$419 69	\$38,688 32

PRINTING AND STATIONERY EXPENDITURES, 1898 — *Continued.*

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$10,706 14	\$2,509 37	\$107 34	\$24,945 78	\$419 69	\$38,688 32
Street Laying-Out Department.....	.....	24 00	.....	284 13	.....	308 13
Street Laying-Out and Construction of Highways .....	.....	.....	.....	194 92	3 00	197 92
Treasury Department.....	.....	129 00	.....	182 11	.....	311 11
Water Department:						
Income Division.....	.....	.....	.....	618 20	9 00	627 20
Distribution.....	.....	.....	.....	291 29	.....	291 29
Deacon and Waste.....	.....	.....	.....	92 44	.....	92 44
Engineering .....	.....	.....	.....	2 64	.....	2 64
Wire Department.....	.....	92 50	.....	528 96	.....	621 46
Record Commissioner, Item.....	996 94	.....	.....	.....	.....	996 94
<i>Carried forward</i>	\$11,703 08	\$2,754 87	\$107 34	\$27,140 47	\$431 69	\$42,137 45

PRINTING AND STATIONERY EXPENDITURES, 1898 — *Continued.*

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$11,703 08	\$2,754 87	\$107 34	\$27,140 47	\$431 69	\$42,137 45
County of Suffolk:						
East Boston District Court.....	.....	.....	.....	36 92	.....	36 92
Medical Examiner.....	.....	.....	.....	5 00	.....	5 00
Municipal Court, Charlestown.....	.....	.....	.....	66 19	.....	66 19
“ “ Dorchester.....	8 33	.....	.....	.....	.....	8 33
“ “ South Boston.....	.....	.....	.....	36 45	.....	36 45
“ “ West Roxbury.....	.....	.....	.....	6 60	.....	6 60
Clerk's Office.....	.....	.....	.....	4 80	.....	4 80
Probate Court. ....	.....	.....	.....	1,222 85	.....	1,222 85
<i>Carried forward</i>	\$11,711 41	\$2,754 87	\$107 34	\$28,519 28	\$431 69	\$43,524 59

PRINTING AND STATIONERY EXPENDITURES, 1898 — *Concluded.*

	Printing done by Rockwell & Churchill.	Photo., Litho. and Plate Printing.	Special Stock.	Stationery.	Binding.	Totals.
<i>Brought forward</i>	\$11,711 41	\$2,754 87	\$107 34	\$28,519 28	\$431 69	\$43,524 59
County of Suffolk — <i>Concluded.</i>						
Registry of Deeds.....	1,887 71	.....	.....	2,413 22	.....	4,300 93
Registry of Deeds, Consolidated.....	.....	.....	.....	289 25	.....	289 25
Superior Civil Court.....	.....	.....	.....	1,502 29	.....	1,502 29
Superior Criminal Court.....	.....	.....	.....	724 70	104 50	829 20
Supreme Court.....	.....	.....	.....	335 78	.....	335 78
<i>Total</i>	\$13,599 12	\$2,754 87	\$107 34	\$33,784 52	\$536 19	\$50,732 04

Clerk of Common Council :

Printing	\$41 18	
Stationery	30 00	
Binding records	2 75	
Stock	1 15	
		\$75 08

The following is a statement of the expenditures for City Council — City Council Proceedings :

Newspaper reports from March, 1897, to February, 1898	\$7,791 67	
Stenographic reports	5,100 00	
Printing	4,520 05	
Indexing proceedings	1,200 00	
Binding	313 00	
Stationery	11 15	
		\$18,935 87

Respectfully submitted,

THOMAS A. WHALEN,
Superintendent of Printing.

APPENDIX.

REPORT OF THE COMMITTEE APPOINTED TO EXAMINE THE ACCOUNTS, FINANCES AND OPERATIONS OF THE PRINTING DEPARTMENT OF THE CITY OF BOSTON FOR THE FINANCIAL YEAR ENDING ON JANUARY 31, 1899.

BOSTON, June 15, 1899.

HIS HONOR MAYOR JOSIAH QUINCY,

City Hall, Boston, Mass.:

DEAR SIR, — The committee appointed to examine the accounts, finances and operations of the Printing Department of the city of Boston for the financial year ending on January 31, 1899, beg leave to submit the following report:

All charges for work done during the past year have been made on the basis of the old contract in force at the time the work was taken over by the Printing Plant, and, while this basis was high at that time, it is more nearly correct now when all the larger printing establishments in Boston are on a nine-hour basis, which materially increases the cost of production. It is presumed that had the work continued under contract there would have been a provision for a material increase in price in the event of the adoption of nine hours.

By the unanimous desire of the other members of the committee, Mr. Thomas P. Nichols of Lynn, a member of the Boston Master Printers' Club, investigated the details of the work of the Plant, including a careful examination of every charge for work done, the amount of stock on hand, and the work in process on the first day of February, and Mr. William Franklin Hall was engaged as an accountant to examine the financial condition. Mr. Hall's report is herewith appended, and is incorporated as a part of this report.

One item of this report is, in the opinion of your committee, wrongly placed. The $\frac{11}{13}$ of the cost of extraordinary repairs (see Mr. Hall's report), amounting to nine hundred and six dollars and twenty-seven cents (\$906.27), which Mr. Hall has added to the cost of the plant, should either be charged to the expenses of the past year or (which would be more fair) be made a separate account, to be included in the expenses of the next year, thus leaving the actual value of the plant, as it should stand on the books, at forty-three thousand and nine dollars and eleven cents (\$43,009.11).

No charge was made by the Plant for storage. Under the old contract there was an annual charge of nine hundred dollars (\$900). Adding this saving to the profit for the year, as shown by Mr. Hall's report, the net profit would be nine thousand nine hundred and fifty-one dollars and twenty-six cents (\$9,951.26). If we deduct from this amount the $\frac{1}{2}\frac{1}{3}$ of the cost of extraordinary expenses, thus charging the whole cost into the running expenses of the past year, the net result would be nine thousand and forty-four dollars and ninety-nine cents (\$9,044.99) profit.

The errors in charges referred to by Mr. Hall are such as are liable to occur in any establishment, and aggregate a total of less than two hundred dollars (\$200) for the year.

Respectfully submitted,

H. G. CURTIS, *Chairman.*

FREDERICK MILLS.

THOS. P. NICHOLS.

GEO. H. ELLIS.

REPORT ON THE AFFAIRS OF THE PLANT FOR THE
YEAR ENDING JANUARY 31, 1899. BY WM.
FRANKLIN HALL, ACCOUNTANT.

The financial condition of the Plant on the first day of February, 1898, was as follows :

<i>Assets.</i>	
Plant	\$42,031 03
Stock on hand, including unfinished work	5,473 00
Cash	449 04
Stamps	5 00
Uncollected accounts:	
For printing	\$14,971 06
" rent	316 66
" heat and power	344 66
	15,632 38
Total	
	\$63,590 45
<i>Liabilities.</i>	
Unpaid bills for stock and materials	\$7,422 23
Pay-roll, accrued but not paid	674 09
Reserve for depreciation on Plant, 10 per cent.	4,203 10
Total	12,299 42
Surplus	
	\$51,291 03

EXHIBIT OF OPERATIONS FOR THE YEAR ENDING
JANUARY 31, 1899.

Total charges to departments for printing, etc.	\$120,929 59
Printing sundry documents chargeable to appropriation	22,542 04
Total.	\$143,471 63

COST OF CARRYING ON THE PLANT.

Stock:

Amount on hand February 1,	
1898	\$5,473 00
Purchases	15,971 64

\$21,444 64

Less stock on hand at close of year, 4,375 91

Ruling, numbering, etc.	\$17,068 73
Pay-rolls for labor and services	18,847 76
Press-room supplies	72,711 04
Electros, cuts and engravings	1,156 25
Outside printing	2,998 44
Stamped envelopes and stamps	251 85
Stationery	9,735 12
Repairs and alterations	1,172 23
Insurance	988 66
Rent	738 00
Less for underletting	\$4,696 24
	1,644 96
	3,051 28
Sundry miscellaneous expenses	2,236 99
Accounts written off	182 57
Depreciation on Plant, 10 per cent.	3,782 79
Total.	134,921 71
Gain on printing, etc.	\$8,549 92
To which add:	
Heat and power sold	\$2,505 39
Costing	2,004 05
Net gain on heat and power	501 34
Entire gain for the year	\$9,051 26

PLANT.

This account stood charged February 1, 1898, with cost of plant	\$42,031 03
Four new presses have been purchased during the year, costing	7 400 00
Extraordinary expenses have been incurred incident to a re-arrangement of the office, taking in more room which required changing partitions, etc., amounting to	\$1,894 93
As the lease of the premises now occupied expires January 1, 1900, this expense is apportioned over twenty-three months, — $\frac{1}{23}$ of this amount is carried forward and $\frac{12}{23}$ charged in the expenses of the year ending January 31, 1899.	
Deduct $\frac{12}{23}$ of \$1,894.93	988 66

Leaves to add to Plant \$906 27

Carried forward \$906 27 \$49,431 03

Brought forward	\$906 27	\$49,431 03
Office furniture has been purchased during the year, the amount of which is added to Plant	680 50	
Type, etc., purchased and added to Plant	2,583 47	
		<u>4,170 24</u>
Total		\$53,601 27
Three presses have been sold for		<u>1,700 00</u>
Leaving cost of Plant now		\$51,901 27
There has been reserved for depreciation on Plant:		
10% in 1897	\$4,203 10	
10% in 1898	3,782 79	
		<u>7,985 89</u>
Which, if deducted, would leave the actual value of Plant as it stands now on the book		<u>\$43,915 38</u>

FINANCIAL CONDITION JANUARY 31, 1899.

Assets.

Plant, as it stands on the books	\$51,901 27
Stock on hand, including unfinished work	4,375 91
Unearned Insurance Premiums	369 00
Accounts receivable, uncollected	<u>22,560 99</u>
Total	\$79,207 17

Liabilities.

Accounts payable	\$7,457 34
Pay-roll, accrued but not paid	911 50
City Treasurer	891 93
Appropriation	1,618 22
Reserve for depreciation on Plant	<u>7,985 89</u>
Total	18,864 88
Surplus	<u>\$60,342 29</u>

Surplus February 1, 1898	\$51,291 03
Added as a result of operations during the year ending January 31, 1899	<u>9,051 26</u>
Total	<u>\$60,342 29</u>

The work of examining the affairs of the Plant has been done in the following manner, viz. :

Mr. Thomas P. Nichols has examined all the charges made for work done, with particular reference to the schedule of rates in force when the Plant was established, and with the exception of a few errors, some in excess and others of undercharges, the charges are all made correctly. He also examined the schedule of stock on hand and the value of unfinished work, and the figures which he made upon these matters have been used in making up the accounts.

After Mr. Nichols had performed his part of the work, as indicated above, the books and accounts were examined by myself and my assistant, and I am prepared to say that the statements made in this report are fully substantiated by the records upon the books of the Plant, and that the accounts are correctly kept and exhibit clearly the operations carried on.

Respectfully submitted,

WM. FRANKLIN HALL,
Accountant and Auditor.



ANNUAL REPORT
OF THE
PUBLIC BUILDINGS DEPARTMENT
FOR THE YEAR 1898.

OFFICE OF THE SUPERINTENDENT OF PUBLIC BUILDINGS,
OLD COURT HOUSE, ROOM 30,
BOSTON, February 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

SIR, — In compliance with the ordinance relating to the Public Buildings Department I have the honor to submit the following, which is the annual report of the Superintendent of Public Buildings :

The public buildings in charge of this department, belonging to the City of Boston, number 125, together with 2 leased buildings and 40 rooms in different buildings, variously occupied for city purposes. The City Hall is occupied entirely by the various departments and offices of the city.

The Fire Department requires for its service the use of 65 buildings, occupied as follows :

42 Engine-houses.	8 Ladder-truck houses.
6 Chemical-engine houses.	1 Repair-shop.
4 Combination w a g o n - houses.	3 Fuel-houses.
	1 Headquarters.

The buildings in use by the Police Department number 20, 12 of which are in use for police station-houses and 3 for lock-ups ; the remaining police stations, which number 5, are in other city buildings.

This department also has charge of the City Hall (Charlestown District), Faneuil Hall and Faneuil Hall Market-house, Charity Bureau, Old State House, and stables of the Department of Sanitary Police.

Estates numbered 62, 64 and 37 Pemberton square, rooms in Tremont Building, and 994 Washington street, were occupied for city offices.

The amount expended the past year for rents and taxes for outside property has been \$18,124.16.

The public buildings occupy 1,187,692 square feet of land.

The school-houses owned by the city number 206, occupying 4,041,382 square feet of land.

In addition, 36 buildings were leased for school purposes at a rental of \$33,736.36, and contained 67 school-rooms.

The Court House and County Jail are used for county purposes alone.

The Municipal District Courts number seven, and occupy rooms in city buildings in various sections of the city.

The county buildings cover 232,165 square feet of land.

The expenditure for repairs, alterations, improvements, heating, furnishing, care and cleaning, have been as follows:

Public buildings:

Public buildings	\$94,834 49	
Electrical Construction Division	77,485 54	
Armories	10,759 11	
Ward-rooms	5,628 53	
Repairs Division	120,891 91	
		\$309,599 58
County buildings		35,605 92
School-houses, public buildings		249,973 69
Public buildings, special appropriations		39,366 64
School-houses, special appropriations		102,797 48
Total expenditures by department,		\$737,343 31

These expenditures in detail are as follows:

PUBLIC BUILDINGS.

Rents and taxes	\$18,124 16
Carpentry, lumber and hardware	2,135 42
Salaries	16,167 81
Carried forward	\$36,427 39

<i>Brought forward</i>	\$36,427 39
Masonry, paving and drains	729 10
Painting and glazing	243 76
Whitening and plastering	123 00
Janitor's care and cleaning	21,357 74
Plumbing	3,253 61
Gas and electric light fixtures	136 53
Gas	863 95
Electric lighting	8,146 17
Heating and ventilation	998 57
Fuel	3,665 81
Furniture	1,845 90
Roofing, gutters and conductors	852 62
Bells and locks	123 13
Iron and wire-work	374 70
Water and ice	2,699 09
Board and shoeing of horse, car and ferry tickets, repairs of carriage, etc.	1,104 69
Advertising, printing, stationery, postage, messenger service and telephone	1,101 09
Auxiliary fire-alarm boxes, rental and repairs of	255 00
Teaming	403 57
Supplies	1,837 02
New safe	52 00
Disinfectants	132 00
Elevator, repairs of	111 13
Stair-treads	318 92
Sand gardens	594 21
City scales, pounds, etc.	79 29
Storehouse labor	1,004 50
Interest	6,060 00
	\$94,834 49

Detail of Expenditures.

Repairs on:	
City Hall	2,261 24
Old Court House	1,727 13
Old Probate building	483 97
Old State House	52 70
Historical building	475 70
West city stables	228 01
Old Public Library building	214 50
<i>Carried forward</i>	\$5,443 25

<i>Brought forward</i>	\$5,443 25
Overseers of the poor :	
Charity Bureau and Wayfarers' Lodge	3,254 53
Markets :	
Faneuil Hall and Quincy	1,089 09
Storehouse, Plympton street	2,004 50
Board of Police :	
Headquarters, Pemberton square	9 50
Fire Department :	
Headquarters, repair-shop and engine-houses	17 70
Outside offices, 64 Pemberton square, No. 73 Tremont street and 994 Washington street, Public Buildings. Miscellaneous :	186 15
City Hall, Charlestown; Curtis Hall, Jamaica Plain; Pound, East Boston; House, 94 Roxbury street; Old Town Hall, Dorchester, and Old Franklin school-house, City Scales, Small-pox Hospital and Old Town Hall, Dorchester	978 20
Fuel furnished at the following buildings :	
City Hall, Old Court House, City Hall, Charlestown; Curtis Hall, Faneuil Hall, Old State House, 62, 64 and 37 Pemberton square	3,665 81
Rents and taxes :	
62, 64 and 37 Pemberton square, 994 Washington street, Lock-up, Mattapan, and parts of buildings 32 and 73 Tremont street	18,124 16
Janitors, engineers and cleaning :	
City Hall, Boston; City Hall, Charlestown; Old State House, Old Court House, Faneuil Hall, Curtis Hall, Milk Inspector, Old Probate Building, 32 and 73 Tremont street	21,357 74
Salaries	16,167 81
Water and ice :	
City Hall, Old City Hall, Charlestown; Old Court House, Old Probate Building, Faneuil Hall, Milk Inspector, Old State House, 30, 32 and 73 Tremont street, and 62 and 64 Pemberton square	2,699 09
<i>Carried forward</i>	<u>\$74,997 53</u>

<i>Brought forward</i>	\$74,997 53
Gas:	
City Hall, Old City Hall, Charlestown; Old Court House, Old Probate Building, Faneuil Hall, Milk Inspector and Old State House, 30 and 32 Tremont street .	863 95
Electric lighting:	
City Hall, Old Probate building, Old Court House, 32, 73 Tremont street, and 62 and 64 Pemberton square	8,146 17
Supplies for janitors	1,837 02
Board and shoeing of horse, car and ferry tickets, and repair of carriage	1,104 69
Teaming, miscellaneous and office supplies .	1,204 15
Interest on mortgage of \$150,000 on 30 and 32 Tremont street building	6,000 00
Vacation schools	594 21
City Architect's division	86 77
Total	<u>\$94,834 49</u>

ELECTRICAL CONSTRUCTION DIVISION.

Expenditures.

Salaries	\$38,862 17
Wire cables, etc.	11,988 90
Printing and stationery	717 89
Gas and electric fixtures	3,824 87
Carpenter work and stock, including all mouldings and hardware	1,615 33
Car and railway fares	1,293 90
Telephone service	94 07
Teaming	593 89
Typewriting	54 75
Iron-work and general supplies	2,283 77
Mason-work	535 45
Motors	182 44
Horse-keeping, carriage, etc.	621 05
Electric light plant, engines and dynamos .	7,606 54
Telephones and fixtures	1,472 74
Painting and glazing	58 53
Lamps	2,087 15
Electric light supplies	880 81
Fire-alarm boxes	1,554 15
Arc lamps	726 33
Furniture	357 81
Miscellaneous	73 00
	<u>\$77,485 54</u>

Receipts.

School-houses, public buildings	\$1,263 51
City Hospital	10,379 19
Fire Department	11,122 93
Street Department:	
Central office	140 25
Paving Division	45 96
Sewer Division	5,771 16
Bridge Division	226 52
Sanitary Division	55 13
Ferry Division	9,589 38
Street Cleaning Division	86 48
Public Library	6,508 74
Park Department	2,892 69
Public Baths	2,392 61
Wire Department	422 64
Children's Institutions	200 14
City Engineer	213 06
City Engineer, Architect Division	49 71
Street Commissioners	569 20
Street Commissioners, Survey Division	401 11
Pauper Institutions	1,030 21
Penal Institutions	879 10
Insane Hospital	30 30
Health Department	246 19
Clerk of Committees	191 66
County of Suffolk	201 00
Printing Department	313 30
Public Grounds	153 08
Market Department	225 64
Water Department	259 79
Election Department	244 52
City Collector	138 27
Overseers of the Poor	53 63
Police Department	75 21
B. F. Sturtevant & Co.	20 63
Chardon-street Home	15 43
Municipal Statistics	34 08
Lamp Department	19 85
Transit Commission	36 66
Soldiers' Relief	18 33
City Auditor	36 66
City Treasurer	36 66
Law Department	54 99
<i>Carried forward</i>	\$56,645 60

<i>Brought forward</i>	\$56,645 60
City Council, incidental expenses	54 99
Board of Aldermen	36 66
J. S. Potter	86 10
S. Goldstein	37 80
Atlantic Works	7 02
Boston Protective Department	35 00
W. A. Muller	99 10
 Total receipts 1898-99	 \$57,002 27

ARMORIES.

Rents and taxes	\$9,185 00
Heating apparatus, gas-fitting and plumbing .	140 19
Fuel	277 22
Gas lighting	622 32
Water-rates	120 10
Carpentry, locks	83 88
Telephone	41 70
Painting	160 95
Teaming	7 75
Janitor	120 00
	\$10,759 11

Detailed Statement.

Rents:

Headquarters Second Brigade, 37 Tremont street; Company A, Fifth Regiment, Congress Hall, Charlestown; Company L, Sixth Regiment, 7 Green street; Company D, First Battalion of Cavalry, Bacon's Hall; Companies A, B, C and D, First Corps of Cadets, 130 Columbus avenue	\$9,185 00
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Water-rates:

First Corps Cadets, Company D, Ninth Regiment; Company A, Fifth Regiment; Company D, First Battalion of Cavalry .	120 10
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Fuel:

Armories of first Corps Cadets, Company L, Sixth Regiment; Company D, Ninth Regiment; Company D, First Battalion of Cavalry; Company A, Fifth Regiment, and headquarters of First Brigade . .	277 22
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<i>Carried forward</i>	\$9,582 32
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<i>Brought forward</i>	\$9,582 32
Gas :	
Armories of First Corps Cadets, Company L, Sixth Regiment; Company D, Ninth Regiment; Company A and Company D, First Battalion of Cavalry and Company A and H, Fifth Regiment	622 32
Repairs for the following companies :	
Company A, First Battalion of Cavalry	15 04
“ D, Ninth Regiment	223 91
“ L, Sixth “	38 66
Headquarters Second Brigade	120 10
Supplies, janitor and telephone	156 76
	\$10,759 11

WARD-ROOMS.

Rents	\$3,971 67
Janitors	804 00
Heating and lighting	363 64
Repairs	11 05
Teaming, supplies, printing, stationery, etc.	174 17
Water-rates	90 00
Gas fixtures	80 50
Furniture	23 50
Inspection and labor	110 00
	\$5,628 53

Detail of Expenditures.

Ward-room	1	\$15 53
“	2	83 59
“	3	80 00
“	4	—
“	5	12 00
“	6	33 50
“	7	192 95
“	8	53 00
“	9	305 39
“	10	—
“	11	—
“	12	19 50
“	13	601 00
“	14	624 00

<i>Carried forward</i>	\$2,020 46
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<i>Brought forward</i>	.	.	.	.	.	\$2,020 46
Ward-room	15	.	.	.	.	37 10
"	16	.	.	.	.	498 00
"	17	.	.	.	.	160 42
"	18	.	.	.	.	57 84
"	19	.	.	.	.	128 60
"	20	.	.	.	.	126 35
"	21	.	.	.	.	540 00
"	22	.	.	.	.	661 29
"	23	.	.	.	.	500 00
"	24	.	.	.	.	689 70
"	25	.	.	.	.	13 00
Printing	.	.	.	.	.	42 52
Voting-lists	.	.	.	.	.	15 00
New keys and locks	.	.	.	.	.	8 60
Supplies, etc.	.	.	.	.	.	39 65
Inspection	.	.	.	.	.	90 00
						\$5,628 53

REPAIR DIVISION.

Expenditures, labor.

Chief of division	.	.	.	\$2,908 33
Clerks and messengers	.	.	.	2,028 23
Janitors and engineers	.	.	.	4,247 11
Carpenters	.	.	.	39,170 69
Carpenters' helpers	.	.	.	595 00
Masons	.	.	.	4,423 95
Masons' tenders	.	.	.	1,538 60
Plumbers	.	.	.	5,288 32
Plumbers' helpers	.	.	.	2,213 39
Roofers	.	.	.	2,206 69
Roofers' helpers	.	.	.	750 64
Glaziers	.	.	.	1,052 82
Painters	.	.	.	5,665 04
Painters' helpers	.	.	.	113 00
Steamfitters	.	.	.	2,394 27
Steamfitters' helpers	.	.	.	2,111 54
Sash and door makers	.	.	.	119 78
Whitewashing	.	.	.	105 38
Whitening	.	.	.	169 97
Plasterers	.	.	.	877 17
Plasterers' tenders	.	.	.	1,047 16
Stone-pointers	.	.	.	391 36

Carried forward . . . \$79,418 44

<i>Brought forward</i>	\$79,418 44
Iron-workers	587 50
Furniture-polishers	514 00
Laborers	3,754 85
Letterers	400 71
Cabinet-makers	93 31
Watchman	446 40
Floor-layers	214 66
Decorators	216 12
Teamsters	245 00
Stone-cutter	104 50
Draughtsman	312 00
Machinist	1,215 12
Machinists' helper	190 34
Machine wood-worker	107 00
Machine wood-workers' helper	250 26
Mill-hand	77 50
Inspector of lumber	204 38
	\$88,352 09

Stock, etc.

Stone	1,558 07
Towing	76 35
Insurance	695 40
Lumber and hardware	7,233 80
Bricks, mortar, etc.	1,646 37
Concrete	295 00
Heating apparatus	5,235 42
Gas fixtures and supplies	280 50
Paint, oils and putty	1,651 57
Fuel	128 54
Teaming	648 20
Plastering and materials	1,245 55
Derrick, and use of same	682 49
Rent of storehouse	450 00
Moving buildings	350 00
Wire lathing	550 00
Car tickets	150 00
Machinery and tools	1,893 03
Ladders	98 85
Telephone	65 47
Furniture	391 50
Electric light and power	186 97
Iron-work	648 83
Locks and keys	36 45
Roofing	959 20

Carried forward \$115,509 65

<i>Brought forward</i>	\$115,509 65
Plumbing stock	1,326 29
Canvas covers and rope	269 61
Supplies and cleaning	219 67
Piling and stock	874 93
Advertising	13 88
Flag-staff	67 10
Stationery and printing	489 22
Horse-keeping, shoeing, etc.	1,808 66
Rafts	312 90

\$120,891 91

Receipts.

Board of Police	\$64 96
Health Department	146 01
City Engineer, Architects Division	16 77
" Main office	106 89
City Hospital	4,219 81
City Messenger	69 03
County buildings	5,204 25
City Council, incidental expenses	827 36
Board of Election Commissioners	11,935 37
Fire Department, general repairs	2,437 59
" " Veterinary Hospital	6,116 43
" " Engine-house 21	5,462 70
Overseers of Poor, Charity Bureau	12 79
" " Chardon-street Home	774 96
" " Wayfarers' Lodge	88
Public Baths and Gymnasium	27,589 06
Public Libraries	1,419 61
Park Commissioners	3 869 56
Printing	7 44
Wire Commissioner	702 27
Water Commissioner	7 13
Superintendent of Streets :	
Main office	430 02
Paving Division	470 71
Sewer	7,374 71
Permit	28 95
Sanitary	1,270 80
Street Cleaning Division	175 70
Inspection of smoke	26 26
Street Watering Division	203 05

Carried forward \$80,971 07

<i>Brought forward</i>	\$80,971 07
Street Commissioners:	
Main office	95 34
Survey Division	1,072 87
Sewer	951 98
Public Lands	143 70
Laying-out Highways	451 09
Music Commission	298 80
School Committee	17 03
Municipal Statistics	153 48
Trustees of Children	514 83
Childrens' Hospital	26 26
Public Institutions	362 07
Parental School	278 86
Pierce Farm	1,065 34
Austin "	754 34
Pauper Institutions	1,132 02
Penal "	121 68
W. J. Jones	10 32
H. A. Brown	7 50
H. B. McDowell	12 75
Chamber of Commerce	9 00
T. Butler & Co.	17 60
W. A. Muller	250 00
Rainsford Island	11,252 31
Marcella-street Home	440 25
Committee on Fourth of July	619 47
	\$101,029 96

COUNTY BUILDINGS.

Janitors' care, cleaning	\$4,029 07
Furniture and furnishings	2,606 33
Electric lighting	6,461 48
Fuel	5,182 65
Gas	444 39
Carpentry	4,421 17
Heating apparatus	606 84
Printing	45 13
Teaming and supplies	1,464 13
Elevator repairs	290 90
Painting and glazing	473 13
Care of lawns	703 48
Masonry	2,532 51
Roofing, iron and wire-work	858 73
<i>Carried forward</i>	\$30,119 94

<i>Brought forward</i>	\$30,119 94
Gas and electric fixtures	397 97
Locks and keys	86 67
Water and ice	1,439 95
Telephone system, Court House	50 75
Plumbing	2,235 63
Safe	550 00
Rents	725 01
	\$35,605 92

Detail Statement.

Court House	\$21,845 61
Municipal Court, Roxbury	1,356 02
“ “ Dorchester	1,581 32
“ “ Charlestown	1,455 71
“ “ East Boston	960 21
“ “ South Boston	1,089 24
“ “ Jamaica Plain	420 16
“ “ Brighton	883 35
County Jail	3,467 20
Supplies	389 13
Court of Registration, Tremont Building	2,157 97
	\$35,605 92

SCHOOL-HOUSES, PUBLIC BUILDINGS.

Furniture	\$33,644 53
Carpentry, lumber and hardware	32,907 44
Heating apparatus	33,758 05
Ventilation	4,156 86
Masonry, paving, drains, etc.	18,127 06
Rents and Taxes:	
Girls' Latin School	\$5,610 47
Primary schools	17,505 89
Evening Drawing Schools	2,245 00
Kindergarten Schools	6,175 00
Manual Training Schools	2,200 00
	33,736 36
Painting and glazing	15,252 65
Whitening and plastering	6,152 56
Blackboards	3,529 06
Locks, keys, and electric bells	4,023 84
Roofing, gutters, and conductors	13,389 26
Iron and wire work	773 99
Repairs of fire-escapes	670 20
Sash elevators	786 73
<i>Carried forward</i>	\$200,908 59

<i>Brought forward</i>	\$200,908 59
Plumbing	22,113 32
Gas-fitting and electric-light fixtures	2,799 38
Teaming	1,659 00
Cleaning buildings and supplies	885 04
Horseshoeing, board of horses, repairs of carriages, harnesses, and car-fares	1,364 92
Salaries	8,205 34
Printing, stationery, and postage	739 00
Rent and care of auxiliary fire-alarm boxes	3,984 54
Cleaning vaults	780 00
Flag-staffs, new, and care of old	1,955 98
Disinfectants	964 85
Tablets	60 00
Fire extinguishers	54 10
Care of lawns	246 55
Electric motor and engines	902 14
Tools	1,402 12
Asphalt	611 65
Plans, advertising, etc.	337 17

Totals for repairs, etc.	\$249,973 69
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Detailed Statement.

Grammar schools	\$88,629 66
Primary schools	79,143 10
High schools	37,577 42
Horace Mann School	689 96
Evening Elementary schools	621 19
Evening Drawing school	3,792 81
Kindergarten schools	8,874 56
Manual Training schools	9,636 30
School Committee Building	1,814 70
Not chargeable to any schools	19,193 99

\$249,973 69

Following are the special appropriations on school-house account expended during the year:

SCHOOL BUILDINGS, IMPROVEMENTS IN.

Henry L. Pierce	\$275 43
Hyde	755 86
Rice	238 45
Edward Everett	380 77

Carried forward . . . \$1,650 51

<i>Brought forward . . .</i>	\$1,650 51
Cyrus Alger	17 66
Roxbury-street	3 50
Norcross	36 40
Glenway	48 60
Wait	4 60
Howard-avenue	5 25
Freeman	10 26
Cushman	144 80
Hancock	64 77
Pormort	5 00
Skinner	252 90
Washington-street, Forest Hills .	10 00
Everett, Northampton street .	87 65
Winship	9 98
Bennett	56 14
John A. Andrew	1,028 03
Baker-street	22 00
Savin Hill	10 00
Lewis	1,134 11
Chestnut-avenue	16 75
Mechanic Arts High	8 55
Grant	3 75
Bailey-street	5 58
Quincy-street	175 81
Lowell	305 50
Canterbury-street	9 00
Emerson, East Boston	1,018 46
Winthrop	21 00
Phillips	8 45
Tyler-street, Primary	74 04
Quincy, Tyler street	29 75
Dillaway	115 84
Sherwin	742 12
Lyman	139 86
Western-street	287 37
Chapman	52 66
Adams-street	392 62
Appleton-street	167 90
Capen	406 74
Howe	214 42
Bunker Hill, Grammar	2,156 21
Bunker Hill, Primary	1,538 25
Old Roxbury High	20 00
Harris	96 94

Carried forward . . . \$12,609 73

<i>Brought forward</i>	.	.	\$12,609 73
Prince	.	.	1,482 15
Franklin	.	.	69 80
Frothingham	.	.	233 95
Eliot	.	.	56 80
Lawrence	.	.	1,279 40
Lauriat-avenue	.	.	27 12
Ticknor	.	.	517 94
Eustis-street	.	.	11 05
Shurtleff	.	.	456 26
Dearborn	.	.	44 89
Stephen M. Weld	.	.	2,223 30
Abby W. May	.	.	9 18
Wyman	.	.	315 75
Roxbury High	.	.	292 81
Agassiz	.	.	139 96
Hugh O'Brien	.	.	738 02
Joshua Bates	.	.	795 92
Yeoman-street	.	.	62 62
Rutland-street	.	.	224 00
Comins	.	.	661 68
Gaston	.	.	61 20
Mount Vernon	.	.	16 70
Bigelow	.	.	36 60
Chauncey-place	.	.	4 88
Fourth-street	.	.	4 00
Medford-street	.	.	10 51
Drake	.	.	40 14
Charles C. Perkins	.	.	41 65
Thomas N. Hart	.	.	13 10
Normal	.	.	51 19
Lincoln	.	.	114 25
Cook	.	.	52 60
Clinch	.	.	798 39
Pierpont	.	.	82 32
Girls' High	.	.	473 94
Way-street	.	.	26 57
School Committee Rooms	.	.	173 36
Brimmer	.	.	46 54
English High	.	.	676 33
Brighton High	.	.	62 33
Wells	.	.	234 73
Harvard, Grammar	.	.	170 39
Martin	.	.	393 59
Margaret Fuller	.	.	22 50
<i>Carried forward</i>	.	.	\$25,860 14

<i>Brought forward</i>	\$25,860 14
Mather, Dorchester	168 25
Minot	267 96
Dorchester High	80 78
Gibson	95 02
Polk-street	27 85
Munroe-street	17 18
Bowditch	461 49
Heath-street	26 12
Centre-street (store)	54 00
Tappan	47 08
Huntington-avenue (Kindergar- ten)	94 60
Masonic Building, East Boston	50 00
Dudley-street (store)	669 39
Charles Sumner	10 00
Washington-street, Dorchester (store)	284 50
William Wirt Warren	266 01
Andrews	1,133 38
Thetford-street	22 32
Baldwin	115 08
Manual Training, East Boston	523 91
Horace Mann	140 16
B. F. Tweed	14 60
Chauncey Hall	4,234 99
Washington-street, Germantown	18 00
West Concord-street	90 02
Phineas Bates	10 00
High and Latin	349 06
Old Mather	6 00
Dwight	242 30
Wise Building	16 50
Prescott	3,576 34
Walnut-street	10 00
Washington, Allston	27 01
Bon Homme Richards	12 50
Cudworth	238 52
Bowdoin	239 86
George-street	32 56
George Putnam	60 12
George Putnam Annex	1,388 94
Byron-court	19 60
Williams	15 00
Morton-street	5 10

Carried forward \$41,022 24

<i>Brought forward</i>	\$41,022 24	
Harbor View-street	44 44	
Winchell	57 04	
Roger Clap	67 72	
Florence-street	23 29	
Gilbert Stuart	139 26	
Lucretia Crocker	111 29	
Old Gibson	6 65	
Atherton	91 04	
Greenwood Hall	2 00	
Concord-street	30 00	
Dudley	96 65	
Evening Drawing	16 81	
East Boston High	86 82	
Noble	3 00	
Adams	28 46	
Manual Training (E street)	8 30	
William H. Kent	1 10	
Moon-street	8 30	
Ingraham	5 33	
Robert G. Shaw	137 15	
South Boston High	59 61	
Lyceum Hall	17 30	
		\$42,063 80
Gilbert Stuart school-house, furnishing	17 73	
Bowdoin school-house, furnishing	3 36	
Brighton High school-house, furnishing	383 68	
Andrews school-house, furnishing	70 12	
Longfellow school-house, furnishing	2,113 69	
Mayhew school-house, furnishing	6,042 38	
Robinson-street school-house, furnishing	3,713 63	
New Grammar school-house, Harris district, furnishing	12,000 00	
Vernon-street school-house, furnishing	4,129 93	
Primary school-house, Aberdeen district, building	1,784 13	
Temporary school-house, Frothingham school- yard	2,695 94	
Temporary school-house, Emerson school dis- trict	2,699 77	
Temporary school-house, Morton-street school- yard	2,599 97	
Temporary school-house, Old Gibson school- yard	2,633 87	
<i>Carried forward</i>		\$82,952 00

<i>Brought forward</i>	\$82,952 00
Bowditch school-house, addition	12,005 56
Grammar school-house, Harris district, building	354 00
Webster school-house, construction account	1,822 07
Paul Revere school-house, construction account	293 45
Munroe-street school-house, construction account	1,129 71
Paul Revere school-house, furnishing	21 08
Old Gibson school-house yard, grading	478 00
Morton-street school-house yard, grading	200 00
Thomas N. Hart primary school-house, construction account	548 22
Temporary wooden buildings, heating	1,200 00
Temporary wooden buildings, furnishing	1,793 39
	\$102,797 48

SPECIAL APPROPRIATIONS, PUBLIC BUILDINGS
DEPARTMENT.

The following amount on special appropriation on Public Buildings have been expended:

Public bath-house	<u>\$39,366 64</u>
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In addition to the foregoing this department has in charge the contracting for, and the supplying of, the fuel for all departments of the city and county, not otherwise provided for, which include the Police, Fire, Streets, Parks, Health, Baths, Public Buildings, Public Libraries, Public Grounds, Paving, Sanitary, Street-Cleaning, Sewer, Bridge, Cemeteries, Gallup's Island, Markets, Police and Fire-boats; also the County and District Municipal Courts. Requisitions are made as needed by each department; the amount required is inspected, weighed, and certified to by an employee of this department. The amount delivered to the several departments for the year ending February 1, 1899, is as follows, viz.:

Furnace coal, tons, 8,853	Cannel coal, tons, 158
Egg " " 3,664	Franklin " " 6
Stove " " 1,767	Nut " " 38
Cumberland coal, tons, 6,408	
	Total, 20,894

Nova Scotia wood, cords	53
Pine wood, cords	101
Total	154
Total cost of above	\$82,604 72

INCOME.

The following are the buildings from which rents have been received during the past year, also from other sources, together with the amounts; all of which are in charge of this department:

Faneuil Hall market and cellars and outside stalls	\$84,999 00
Faneuil Hall building, stalls and cellar under Faneuil Hall	
Old State House	11,850 00
House, 94 Roxbury street	250 00
Stable, Charlestown District	162 50
Curtis Hall	208 00
Ward-rooms	245 00
Rotunda and offices, Quincy Hall	3,500 00
Produce Exchange	1,800 00
Rooms in Quincy Hall	447 50
Old Franklin school-house	100 00
Electrical Construction Division	57,313 52
Repair Division	100,735 15
Sale of horse	25 00
“ “ old material	38 06
Armories:	
Rent from Commonwealth	10,000 00
	\$271,673 73

The following list will show the number and location of buildings belonging to and hired by the city, which are under the charge of this department. Also the reports of the Repair and Electrical Construction Divisions, submitted by the Chiefs of the Divisions.

Respectfully submitted,

JOHN DROHAN,

Superintendent of Public Buildings.

PUBLIC BUILDINGS.

Buildings.	Location.	No. of ft. in lot.	Remarks.
City Hall.....	School st.....	25,915	
City Hall.....	City sq., Charles- town.....	8,246	Police Station No. 15 in this building; also branch of the Public Library, and Municipal Court and Evening Drawing School. Police wagon stable on this lot.
Faneuil Hall, and market under same.....	Faneuil Hall sq...	8,460	
Faneuil Hall Market house, and hall over same.....	North and South Market sts.....	27,400	
Old State House.....	State st.....	4,239	
South City stables.....	Albany st.....	90,780	Four build'gs and four sheds.
Highland-street stables...	Highlands.....	81,082	Three buildings.
West City stables.....	North Grove st...	33,306	Two buildings.
Curtis Hall.....	South st., W. R...	49,907	Branch of Public Library in this building.
Offal depot, wharf and dock.....	Albany st.....	39,511	
Repair Division Work- shop.....	Wareham st.....	8,500	
Repair-shop annex.....	Harrison ave.....	3,816	
Old Armory building.....	Maverick st.....	4,337	Ward-room 2 in this build- ing; upper part leased to Post 153, G.A.R.
Reception-house.....	North Grove st...	11,792	
Paving Dept. yard.....	Hancock street, Ward 20.....	109,444	Four buildings occupied by Paving Department.
House and land.....	94 Roxbury st....	4,190	Rents for \$300 per annum.
Central Charity Bureau, } City Temporary Home.. }	Chardon st.....	19,962	Boiler and storehouse on lot.
Town Hall.....	Washington st., Dorchester.....	16,800	
Town Hall.....	Washington st...	13,431	Ward-room 25 in this build- ing; other room leased to Post 92, G.A.R.
Stable.....	Rutherford ave...	17,300	Two buildings occupied by Health Department.
Old bath-house.....	Cabot st.....	7,469	Ward-room 18 in this build- ing.
Wayfarers' Lodge....	Hawkins st.....	9,523	
Church building.....	Cor. Dudley and Vine sts.....	11,592	Ward-room 17 in this build- ing, and Vine-st. Chapel on this lot.
Old Franklin Sch'l-house,	Washington st...	11,471	
			Ward-room, Posts 15 and 7, G. A. R., in this building.

PUBLIC BUILDINGS. — *Concluded.*

Buildings.	Location.	No. of ft. in lot.	Remarks.
¹ Old Winthrop School-house.....	Bunker Hill st., Charlestown ...	7,927	Armory and Ward-room 3 in this building.
¹ Old Court House.....	Court sq.....	15,175	Occupied by city offices.
Westerly Hall.....	Centre st., West Roxbury	5,644	Public Library Branch in this building.
Stable	Chauncey pl.....	.....	Rents for \$150 per year, on lot with Chauncey-pl. School.
¹ Smith School-house.....	Joy st.....	1,938	Leased to Post 134, G.A.R.
¹ Engine-house lot.....	Soley st.....	2,230	
¹ Old Probate Court build- ing	Court sq.....	2,423	Occupied by the Street De- partment.
Historical building.....	30 and 32 Tremont st.	25,000	Mortgage for \$150,000.
Ward-room 20.....	Meeting House Hill.....	.....	On lot with Mather School- house.
Ward-room 19. ...	Elmwood st. ...	5,684	

¹The above buildings were surrendered to this department, as not wanted for school, fire or county purposes.

In addition to the foregoing, the following property was leased for the use of this department :

Location of Buildings.	Rent.	No. of Rooms.	Occupied by
37 Pemberton sq.....	\$6,000 per year and taxes. Police Department pay one-fourth of rent.....	Whole building,	Police Commissioners and Police Dept.
994 Washington st.....	\$1,100 per year....	5	Milk Inspector.
Mattapan	\$198 per year.....	3	Lock-up, Police Dept.
73 Tremont st.	\$4,713 per year....	14 rooms.....	Law Department.
73 Tremont st.	\$3,494 per year....	9 rooms.....	Sanitary, Street-Cleaning and Bridge Divisions of the Street Dept.
73 Tremont st.	\$3,328 per year....	7 rooms.....	Sewer Assessment Divi- sion of the Street Com- missioners' Dept.
73 Tremont st.	\$361 per year....	2 rooms.....	Street-Watering Division of the Street Dept.
62 and 64 Pemberton sq.....	\$2,900 per year and taxes.....	Whole build- ings.....	Bath, Music, Street Dept., Smoke Division, Lec- ture, Art, Water and Park Departments.

ARMORIES.

The following list will show the location and rents of all armories February 1, 1899, in charge of this department:

Occupied by	Rent per annum.	Location of Armories.
Headquarters, Second Brigade.....	\$900	37 Tremont street.
Company A, Fifth Regiment.....	\$1,200	Congress Hall, Charlestown, Lease expires January 1, 1901.
“ H, “ “	City building.	Combination Wagon-house, No. 7, Winthrop st., Charlestown.
“ L, Sixth “	\$1,085	7 Green street. Lease expires May 1, 1900.
“ D, Ninth “	City building.	Old Winthrop school-house, Bunker Hill street.
“ A, First Batt. of Cavalry	City building.	Engine-house No. 4, Bulfinch street.
“ D, “ “ “	\$1,200	Bacon's Hall.
“ A, “ Corps of Cadets..	\$4,800	130 Columbus avenue.
“ B, “ “ “ ..		
“ C, “ “ “ ..		
“ D, “ “ “ ..		

COUNTY BUILDINGS.

Buildings.	Location.	No. of ft. in lot.	Remarks.
Court House	Pemberton sq....	87,035	Three buildings.
Jail	Charles st.	130,740	
Municipal Court, Southern District	Roxbury st.....	14,390	
Municipal Court, E. Boston.	High School building.		Evening Drawing School in this building.
“ “ S. Boston.	Corner Dorches- ter and West Fourth sts.		
“ “ Charlestown.	City sq.		
“ “ Brighton..	Washington st.		
“ “ W. Roxbury.	Station-house 13.		
“ “ Dorchester.	“ 11.		
Court of Registration.....	73 Tremont st....		

POLICE STATION-HOUSES.

	Location.	No. of feet in lot.	Remarks.
No. 1.....	Hanover st.	6,188	
2.....	Court sq.....	2,029	
3.....	Joy st.	6,100	
4.....	La Grange st.....	5,150	
5.....	East Dedham st.....	3,303	Addition built in 1884.
6.....	West Broadway	4,253	
7.....	Meridian st.....	3,773	
8.....	Commercial st.	5,323	Harbor Police station.
9.....	Dudley st.	6,797	Police-wagon stable in this house.
10.....	Pyncheon st.....	6,203	
11.....	Adams st., Ward 20.....	7,500	Court-room and branch of Public Library in this building.
12.....	East Fourth st., near K st. .	7,217	
13.....	Seaverns ave., cor. Maple place, W. Roxbury	9,701	Municipal Court, W. Roxbury District, and patrol-wagon house on this lot.
14.....	Washington st., Brighton...	53,908	Municipal Court, Brighton District, in this building.
15.....	City Hall, Charlestown.		
16.....	Boylston st.....	10,486	
Lock-up...	Walnut st., Neponset.....	1,476	
"	Centre st., W. Roxbury.....	1,628	
"	Mattapan .....	.....	Hired at rental of \$198 per year.
Police quarters.	Washington st., Bank building, Dorchester.....	11,640	Branch Public Library in this building.

ENGINE-HOUSES.

	Location.	No. of feet in lot.	Remarks.
No. 1.....	Dorchester st.....	5,698	Addition built 1874. Municipal Court, Ward-room 15, and two classes, branch of Bigelow School, in the building.
2.....	East Fourth st., cor. O st....	4,000	
3.....	Harrison ave., cor. Bristol st.	4,000	Ladder Truck 3 in this building.
4.....	Bulfinch st.....	6,098	Lancers' Armory, Chemical Engine No. 1 and Water Tower No. 1 in this building.
5.....	Marion st., E. B.	1,647	
6.....	Leverett st.	2,269	

ENGINE-HOUSES. — *Concluded.*

	Location.	No. of feet in lot.	Remarks.
No. 7.....	East st.	1,893	
8.....	Salem st.....	2,568	
9.....	Paris st., E. B.....	4,720	Ladder Truck 2 in this building.
10.....	Mt. Vernon st.....	1,886	
11.....	Saratoga st.	10,000	Combination 4 in this building.
12.....	Dudley st.	7,320	
13.....	Cabot st.	4,832	
14.....	Centre st.	5,713	
15.....	Dorchester ave.....	2,843	
16.....	River st., Dor. Dist.	12,736	Ladder Truck 6 in this building.
17.....	Meeting-House Hill, D. D.	9,450	Ladder Truck house 7 on this lot.
18.....	Harvard st., Dor. Dist.	9,440	
19.....	Norfolk st., Dor. Dist.....	7,683	
20.....	Walnut st.	9,000	
21.....	Columbia road, Dor. Dist.	12,661	
22.....	Dartmouth st.	4,463	
23.....	Northampton st.....	3,445	
24.....	Cor. Warren & Quincy sts.	4,186	
25.....	Fort Hill sq.	4,175	Ladder Trucks 8 and 14 in this building.
26-35...	Mason st.	5,623	
27.....	Elm st., Charlestown.....	2,600	
28.....	Centre st., West Roxbury .	10,377	Ladder Truck 10 in this building.
29.....	Chestnut Hill av., Brighton,	14,358	Ladder Truck 11 in this building.
30.....	Centre st.	12,251	
32.....	Bunker Hill st.	8,188	
33.....	Boylston st.....	5,646	Ladder Truck 15 in this building.
34.....	Western ave., Brighton ..	4,637	
36.....	Monument st.....	5,668	Combination 5 in this building.
37.....	Cor. Longwood and Brook- line aves.	5,400	Chemical Engine No. 3 in this building.
38-39...	Congress st.	4,000	
40.....	Summer st.	4,010	
41.....	Harvard ave., Brighton ...	6,112	Chemical Engine No. 6 in this building.
42.....	Washington st., bet. Ather- ton and Beethoven sts...	3,848	Chemical Engine No. 5 in this building.
43.....	Andrew sq.	5,133	Combination 3 in this building.
45.....	Washington st., W. R. ...	14,729	Ladder Truck No. 16 in this house.

CHEMICAL ENGINE-HOUSES.

	Location.	No. of feet in lot.	Remarks.
No. 2.....	Church st.	3,412	
4.....	Shawmut ave.	889	
7.....	Chelsea st.	1,346	
8.....	B st., South Boston.....	1,804	
10.....	Eustis st.	1,754	
11.....	North Grove st.....	3,918	

COMBINATION WAGON-HOUSES.

	Location.	No. of feet in lot.	Remarks.
No. 1.....	Dorchester ave.....	4,875	Armory Co. H, Fifth Regiment, in this building.
2	East Fourth st.	3,101	
6.....	Washington st., Dorchester,	6,874	
7.....	Winthrop st.	3,000	

LADDER-HOUSES.

	Location.	No. of feet in lot.	Remarks.
No. 1.....	Friend st.....	1,676	On lot with Engine House 17. Chemical Co. No. 9 in this bldg. Chemical Co. No. 12 in this bldg.
4.....	Cor. Winslow & Dudley sts.,	3,923	
5.....	West Fourth st.	2,469	
7.....	Meeting-House Hill.....		
9.....	Main st., Charlestown.....	4,290	
12.....	Tremont st.	4,350	
13.....	Washington st., near Dover,	1,007	
17.....	Harrison ave.	2,134	

MISCELLANEOUS. — *Fire Department.*

	Location.	No. of feet in lot.	Remarks.
Repair-shop.....	Albany st.....	23,663	Water Tower No. 2 and Wrecking Wagon in this building.
Fire Department Head- quarters.....	Bristol st.....		
Fuel-house.....	Salem st.....	417	
Fuel-house.....	Main st., Charlesto'n,	2,430	
Fuel-house.....	Dorchester st.....	1,610	
Old Engine-house.....	Mt. Vernon st., West Roxbury.....	16,275	

City Scales, located as follows, viz. :

North Scales, Haymarket square.

South Scales, City stables, yard, Albany street.

South Boston Scales, Foundry street and Dorchester avenue.

Roxbury Scales, Eustis and Mall streets.

Brighton Scales, Rockland street, off Washington street.

East Boston Scales, Liverpool street.

West Roxbury Scales, Centre and La Grange streets.

Jamaica Plain Scales, Centre street and Starr lane.

City Pound, located as follows, viz. :

East Boston, Ashley avenue.

SCHOOL-HOUSES.

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Abby W. May...	Pr.	Thornton st., R.	11,052	1893	6	Old Agassiz School on this lot.
Aberdeen	"	Chiswick road,	25,000	1897	2	
Adams	Gr.	Sumner st., E.B.	21,000	1856	13 and hall.	
Adams st.....	Pr.	Dorchester....	44,555	1861	2	
Agassiz.....	Gr.	Brewer st., W.R.	42,244	1893	12 and hall.	
Albert Palmer..	Pr.	Eustis st.....	16,165	1895	6	
Andrews.....	"	Genesee st.....	19,761	1896	9	
Appleton st....	"	Appleton st....	18,454	1870	12	

SCHOOL-HOUSES. — *Continued.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Atherton.....	Pr.	Columbia way. Dor. Dist.	25,239	1872	8	
Auburn	"	School st., Br...	12,340	.....	4	
Bailey st.....	"	Dorchester.....	33,838	1880	4	
Baker st.....	"	West Roxbury,	10,464	.....	1	
Baldwin.....	"	Chardon court..	6,139	1864	6	
Bartlett st.....	"	Bartlett st., R...	7,627	1846	6	
Benj. F. Tweed..	"	Cambridge st., Chn.....	16,727	1892	6	
Benj. Cushing..	"	Robinson st....	25,032	1897	8	
Benjamin Pope,	"	O st., S.B.....	20,000	1883	8	
Bennett.	Gr.	Chestnut Hill ave., Br.....	26,648	1874	7 and hall.	
Bennett Branch,	"	Dighton pl., Br.,	9,605	1886	6	
Bigelow.....	"	West Fourth st., S. B.....	21,958	1850	14 and hall.	
Blackinton.....	Pr.	Leyden st., E.B.	29,166	1892	6 and hall.	
Bon Homme Richard	"	Meeting-House Hill, D. D.....	.....	1895	1	On lot with Mather school-house.
Bowditch.....	Gr.	Green st., J. P.,	23,655	1891	14 and hall.	
Bowdoin	"	Myrtle st.	10,777	1895	16 and hall.	
Brighton High..	H.	Cambridge st...	41,871	1895	17 & 2 halls.	
Brimmer	Gr.	Common st....	11,401	1843	14 and hall.	
Bunker Hill.....	"	Baldwin st., Ch. }			14 and hall.	Ward-room 4 in this building.
Bunker Hill.....	Pr.	Bunker Hill st. }	19,660	.....	8	
Canterbury st...	"	West Roxbury	20,121	.....	2	
Capen.....	"	East Sixth st., S. B.....	12,354	1871	6	
Chapman.....	Gr.	Eutaw st., E. B.	20,500	1850	13 and hall.	Ward-room 1 in this building.
Chapman an- nex.....	{ Pr. & MT	" " "	.....	1896	2	In the Chapman school-house yard.
Charlest'n High,	H.	Monum't sq., Ch.	13,502	.....	10 and hall.	
Chas. C. Perkins,	Pr.	St. Botolph st...	16,000	1891	8 and hall.	
Charles Sumner,	Gr.	Ashland st., W.R.	30,000	1877	10 and hall.	
Chauncey pl.....	....	Charlestown...	7,410	.....	1	Stable on this lot.
Chestnut ave...	Pr.	West Roxbury..	13,733	.....	2	
Choate Burnh'm,	"	East Third st., S. B.....	17,136	1894	8	

SCHOOL-HOUSES. — *Continued.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Christo'r Gibson,	Gr.	Mt. Bowdoin, Dor. Dist.....	39,620	1895	14 and hall.	
Clinch.....	Pr.	F st., S. B.....	13,492	1871	6	
Comins.....	Gr.	Tremont st., Rox.....	22,169	1856	13 and hall.	
Common st.....	Pr.	Charlestown...	7,001	.....	6	
Cook.....	"	Groton st.....	10,170	1852	6	
Cottage pl.....	Kg.	Highlands.....	7,094	1859	4	
Cross st.....	Pr.	Charlestown....	1,708	.....	2	
Cudworth.....	"	Paris and Gove sts., E. B.....	25,000	1894	11	
Cushman.....	"	Parmenter.....	.....	1867	16	On lot with Hancock.
Cyrus Alger.....	"	W. Seventh st., S. B.....	16,560	1880	8	
Dearborn.....	Gr.	Dearborn court, Rox.....	36,926	1852	14 and hall.	
Dillaway.....	"	Kenilworth st., Rox.....	22,824	1882	12 and hall.	
Dorchester ave.,	Pr.	Dorchester ave., Ward 24.....	34,460	.....	4	
Dorchester High,	H.	Dorchester ave., Ward 20.....	59,340	1870	8	
Drake.....	Pr.	C st., S. B.....	10,260	1869	6	
Dudley.....	Gr.	Dudley st., Rox.,	26,339	1874	14 and hall.	
Dwight.....	"	W. Springf'd st.	19,125	1857	14 and hall.	
E. Boston High.,	H.	Meridian st., E. B.....	13,616	1846	6 and hall.	Library and court- room in this building.
Edward Everett,	Gr.	Sumner st., Ward 20.....	33,890	1876	10 and hall.	Old Everett school- house on this lot.
Ellot.....	"	N. Bennet st....	11,077	1838	14 and hall.	
Emerson.....	"	Prescott st., E. B.....	39,952	1865	16 and hall.	
Emerson.....	Pr.	Poplar st., W. E.	5,924	1861	6	
English High...	H.	Montgomery st.	85,560	1877	39 & 2 halls.	South End Branch of Public Library in this building.
Everett.....	Gr.	Camden st....	32,409	1860	14 and hall.	
Everett.....	Pr.	Brentwood st., Br.....	44,237	.....	2	
Florence st.....	"	Florence st., W. R.....	25,030	.....	6	Addition built 1890.
Franklin.....	Gr.	Ringgold st....	16,439	1859	14 and hall.	
Freeman.....	Pr.	Charter st., W. E.	5,247	1868	6	

SCHOOL-HOUSES. — *Continued.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Frothingham ...	Gr.	Prospect st., Charlestown .	22,079	1874	16 and hall.	
Frothingham annex	Pr.	Prospect st.		1898	2	On lot with Frothingham school-house.
Gaston	Gr.	East Fifth, cor. L st., S. B. ...	35,358	1872	14 and hall.	
George Putnam,	"	Columbus ave., Egleston sq. .	31,784	1880	10 and hall.	
George st.	Pr.	Highlands	18,894	1861	6	
Girls' High	H.	West Newton st.	32,950	1870	66 and hall.	The number of rooms include those for recitation and apparatus.
Gilbert Stuart ..	Gr.	Richmond st., Dor. Dist.	30,128	1896	14 and hall.	
Glenway	Pr.	Ward 20.	25,827	1880	2	
Grant	Gr.	Phillips st., West End	3,744	1852	4	
Hancock	"	Parmenter st., North End ...	31,998	1847	14 and hall.	Cushman school-house on this lot.
Harbor View st.,	Pr.	Dorchester.	27,808	1883	4	Mayflower school-house on this lot.
Harris	Gr.	Adams st., Ward 24	37,150	1861	8 and hall.	Little Emily school-house on this lot.
Harvard	"	Devens st., Ch.,	16,306	.....	14 and hall.	Ward-room 5 in this building.
Harvard	Pr.	N. Harvard st., Brighton.	20,750	.....	4	
Harvard Hill ...	"	Harvard st., Ch.	4,645	.....	8	
Hawes Hall.	"	W. Broadway, So. Boston ...	16,647	1823	8	Simmonds school-house on this lot.
Heath st.	"	Highlands	10,669	1857	2	
Henry L. Pierce,	Gr.	Washington st., Ward 24.	64,439	1891	12 and hall.	
Hillside	Pr.	Elm st., J. P. ...	18,613	.....	6	
Hobart st.	"	Brighton	10,000	1884	2	
Horace Mann ...	D. M.	{ Newbury st. ...	8,400	1889	18 & 2 halls.	
Howard ave.	Pr.	Mt. Pleasant, Roxbury	29,090	1882	6	
Howard ave. annex	"	Howard ave., Dor. Dist.		1896	2	On lot Howard-av. school-house.
Howe	"	West Fifth st., So. Boston ...	12,494	1874	8	
Hugh O'Brien ..	Gr.	Dudley st., Rox.	40,554	1887	14 and hall.	
Hugh O'Brien annex	"	" " "		1896	2	On lot Hugh O'Brien school-house.

SCHOOL-HOUSES. — *Continued.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Hyde.....	Gr.	Hammond st., Roxbury	20,754	1884	14 and hall.	Used for store-house.
Ingraham.....	....	Sheafe st., N.E.,	2,354	1848	3	
Ira Allen.....	Pr.	Leon st., Rox...	10,057	1851	4	
John A. Andrew,	Gr.	Dorchester st., South Boston,	24,889	1876	16 and hall.	
Joshua Bates ...	Pr.	Harrison ave...	15,237	1884	8	
Lawrence	Gr.	B and W. Third sts., S. B.....	14,343	1856	14 and hall.	
Lewis	"	Sherman st., Roxbury	27,850	1868	12 and hall.	
Lincoln	"	East Broadway, South Boston.	24,500	1859	14 and hall.	
Little Emily	Pr.	Adams st., Dor. ....	.....	1895	1	
Longfellow.....	Gr.	Hewlett, W. R..	21,679	1897	10 and hall.	
Lowell	"	Centre st., Rox.	35,241	1874	14 and hall.	On lot with Harris school-house.
Lowell annex ...	"	Mozart st., Rox. ....	.....	1896	2	
Lucretia Crocker	Pr.	Parker st., Rox.	30,000	1884	8	
Lyceum Hall....	"	Meeting-House Hill, Dor.	21,319	.....	6	
Lyman	Gr.	Paris st., E. B..	26,200	1870	14 and hall.	
Margaret Fuller,	Pr.	Glen Road, Jamaica Plain	14,252	1892	6	
Martin	Gr.	Huntington av.	28,307	1885	14 and hall.	
Mary Hemenway	"	Adams st., D.D.	30,000	1897	13 and hall.	
Mather	"	Meeting-House Hill, Dor.	123,050	1872	10 and hall.	
Mayflower.....	C. S. }	Harbor View.. st., Dor. Dist.		1895	1	Old Mather and Bon Homme Richard school-houses on this lot, also Ward-room 20.
Mayhew.....	Pr.	Chamber st., West End....	14,128	1897	14	
Mead st.	"	Charlestown ..	5,857	1847	4	
Mechanic Arts..	H.	Belvidere st., Back Bay	22,881	1893	16	
Medford st.	Pr.	Charlestown ...	12,112	1886	4	
Minot	Gr.	Neponset ave., Dor. Dist.....	31,500	1885	7 and hall.	
Mt. Pleasant av.,	Pr.	Highlands	9,510	1847	2	

The number of rooms includes one used as a blacksmith shop.

SCHOOL-HOUSES. — *Continued.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Morton st.....	Pr.	Dorchester....	21,115	1895	4	
Morton-st. annex.....	"	"	.....	1898	2	On lot with Morton-st. School.
Mount Vernon..	"	Mt. Vernon st., Ward 23, W.R.,	22,744	.....	4 and hall.	
Munroe st.....	"	Highlands	17,639	.....	.....	Being rebuilt.
Munroe-st.ann'x	"	Bower st., Rox.,	1,250	1897	3	2 buildings.
Noble.....	"	Princeton st., East Boston..	17,500	1874	8	
Noble annex	"	Princeton st.....	.....	1898	2	On lot with Noble School.
Norcross	Gr.	D st., S. B.....	12,075	1868	14 and hall.	
N. Margin.....	{ L. M.	{ N. Margin st., North End ...	{ 1,661	{ 1837	{ 2	
Old Oak sq. ....	....	Brighton	9,796	.....	2	Unoccupied.
Oak sq.....	Pr.	Nonantum	20,000	1894	2	
Old Agassiz.....	"	Burroughs st., J. P.....	.....	.....	6	On lot with Agassiz School.
Old Brighton High.....	....	Chestnut Hill ave., Br.....	54,448	.....	5 and hall.	Unoccupied.
Old Everett	Pr.	Willis st., D.D.,	.....	1855	7	On lot with Edw. Everett.
Old Gibson.....	"	School st., Ward 20.....	52,786	1857	6	
Old Gibson annex.....	"	Athelwold st.....	.....	1898	2	On lot with Old Gibson School.
Old Mather.....	"	Meeting-House Hill, Dor.....	.....	1856	6	On lot with Mather school-house.
Old Parkman.....	....	Silver st.....	5,306	1848	6	Unoccupied.
Old Roxbury High.....	Kg.	Kenilworth st., Roxbury	6,990	1861	8	
Parkman.....	Pr.	W. Broadway..	10,160	1842	12	
Paul Revere.....	"	Prince st.	18,986	1898	18	
Phillips.....	Gr.	Phillips st., West End....	11,190	1862	14 and hall.	
Phillips st.....	Pr.	Highlands	20,355	1867	8	
Phineas Bates...	Gr. Pr.	{ Beech st., W. Roxbury	{ 37,500	{ 1896	{ 4	
Pierpont.....	MT	Hudson st.....	4,216	1850	1	Ward-room 7 in this building.
Plummer.....	Pr.	Lamson and Summer sts., East Boston .	35,073	1891	10 and hall.	
Polk st.....	"	Charlestown ...	12,143	1878	6	
Poplar st.....	"	West Roxbury .	7,842	.....	1	Unoccupied.

SCHOOL-HOUSES. — *Continued.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Pormort.....	Pr.	Snelling place, West End	4,373	1855	6	
Prescott.....	Gr.	Elm st., Charles- town	16,269	.....	10 and hall.	
Prescott annex .	MT	Elm st., Charles- town .....	.....	1896	1	On lot with Pres- cott School.
Prince.....	Gr.	Newbury st.....	22,960	1875	12 and hall.	Ward-room 11 in this building.
Public Latin	L.	Warren ave. ....	.....	1877	39 and hall.	On lot with Eng- lish High School.
Quincy	Gr.	Tyler st.....	12,413	1847	14 and hall.	
Quincy st.....	Pr.	Dorchester.....	20,000	1882	2	
Quincy st.....	"	Highlands	23,453	1875	8	
Rice	Gr.	Dartmouth st. .	27,125	1869	14 and hall.	Normal and Rice Traning-Schools and Ward room 10 in this build- ing.
Robert G. Shaw.	"	Hastings st., W. Roxbury .	40,000	1892	8 and hall.	
Roger Clap.....	"	Harvest st., Dor. Dist.....	21,548	1896	10 and hall.	
Roxbury High..	H.	Warren st.	25,617	1891	19 and hall.	
Roxbury st.....	Pr.	Highlands	14,147	1874	8	
Rutland st.....	"	Rutland st.....	7,850	1851	6	
Savin Hill.....	"	Savin Hill ave., Dor. Dist.....	20,060	1884	2	
School st.	"	Egleston sq. ...	20,200	.....	2	
Sharp	"	Anderson st....	5,887	1824	6	
Sherwin.....	Gr.	Madison sq., Roxbury	32,040	1870	16 and hall.	
Shurtleff	"	Dorchester st..	40,553	1869	14 and hall.	
Simonds	Pr.	W. Broadway, South Boston. ....	.....	1840	3	On Hawes school- house lot.
Skinner.....	"	Fayette st.....	5,238	1870	6	
Smith st.....	Kg.	Roxbury	6,952	1849	2	
Somerset st....	Pr.	Ward 6.....	6,300	1824	4	
Stephen M. Weld	"	Canterbury st., W. Roxbury.	34,266	1895	6	
Stoughton	"	River st., Lower Mills	29,725	1856	8	
Tappan	"	Lexington st., East Boston..	11,500	.....	8	
Thetford st.	"	Dorchester	29,879	1875	8	

SCHOOL-HOUSES. — *Continued.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Thomas N. Hart,	Gr.	East Fifth st., South Boston,	26,264	1889	13 and hall.	
Thomas N. Hart. annex	Kg.	H st., S. B.	11,477	1895	2	
Ticknor	Pr.	Dorchester st., South Boston,	11,486	1865	12	
Tileston	Gr.	Norfolk st., Ward 24.	83,640	1868	8 and hall.	
Tuckerman	Pr.	East Fourth st., South Boston,	11,655	1850	6	
Tyler st.	"	Tyler st.	3,900	1855	6	
Union st.	"	Brighton	67,280	.....	2	
Vernon st.	"	Highlands	17,256	1897	10	
Wait	"	Shawmut ave. ...	16,341	1860	8	
Walnut st.	"	Neponset, D.D.,	22,790	1856	7	
Ware	Gr.	N. Bennet st. ...	6,439	1852	4	Ward-room 6 in this building.
Warren	"	Summer st., Ch.	16,429	.....	14 and hall.	
Washington All- ston	"	Cambridge st., Brighton	22,000	1878	10 and hall.	
Washington All- ston annex....	"	Cambridge st., Brighton.	11,477	.....	3	
Washington st. .	Pr.	Forest Hills	24,010	.....	2	
Washington st. .	"	Germantown W. R.	13,130	.....	2	
Way st.	"	Ward 9.	2,508	1850	3	
Webb ..	"	Porter st.	7,492	1853	6	
Webster	"	Webster av., Br.	19,761	.....	4	New building be- ing erected.
Wells	Gr.	Blossom st., West End	10,770	1868	12 and hall.	
West Concord st.	Pr.	W. Concord st..	10,756	1845	10	Ward-room 12 in this building.
West Roxbury High	H.	Elm st., W. R. ...	47,901	.....	6	
Weston st.	Pr.	Highlands	14,973	1877	8	
Williams	"	Homestead st., Roxbury	26,145	1892	4	
William H. Kent,	"	Moulton st., Chn	15,817	1895	6	
William Wirt Warren	"	Waverley st., Br.	27,137	1892	6 and hall.	
Winchell	"	Blossom st.	14,465	1885	12	
Winship	"	Dighton pl., Br.	34,366	.....	4	

SCHOOL-HOUSES. — *Concluded.*

NAME.	Grade of School.	Location.	No. feet in lot.	When built.	No. of Rooms.	Remarks.
Winthrop	Gr.	Tremont st.	16,100	1855	14 and hall.	
Winthrop st.	Pr.	Highlands	9,775	1857	4	
Wyman	"	Wyman st., J.P.	30,414	1892	6	
Yeoman st.	"	Highlands	18,200	1870	12	
School Committ- tee Building ..	....	Mason st.	7,148	.....	10 and com- mittee chamber.	

Gr., Grammar; Pr., Primary; H., High; Kg., Kindergarten; L., Latin; D. M., Deaf Mutes; N. & T., Normal and Training; L. M., Licensed Minors; M. T., Manual Training; C. S., Cooking School.

The following lots of land have been bought for school purposes, amounting to 303,159 sq. feet of land:

Adams and Chestnut streets, 20,399 sq. feet of land.

Baker street, West Roxbury, 21,000 sq. feet of land.

Centre street, Dorchester, 60,000 sq. feet of land.

Walk Hill street, 30,000 sq. feet of land.

Paul Gore street, 32,346 sq. feet of land.

Marion street, 27,500 sq. feet of land.

Thomas Park, 79,526 sq. feet of land.

Quincy street, Roxbury, 32,388 sq. feet of land.

HIRED BUILDINGS.

In addition to the foregoing, the following rooms have been hired for school purposes. Rent and taxes paid for the same during the year amounted to \$33,736.36:

NAME.	Location.	Remarks.
Emerson Branch	Maverick Chapel, Benning- ton st., East Boston	Rent, \$672 per annum, in- cluding heating.
Emerson Branch	Maverick Chapel, Benning- ton st., East Boston	Rent, \$300 per annum. (Vacated Nov. 1, 1898.)
Emerson Branch	242 Bennington st., E. B.	Rent, \$480 per annum. (Vacated Nov. 1, 1898.)
Charles Sumner Branch..	Wise Hall, South st., Roslin- dale	Rent, \$1,200 per annum.
Sherwin Branch	Day's Chapel, Parker st., Roxbury	" \$350 "
Edward Everett Branch..	Athenæum Building, Cot- tage st., Dorchester	" \$800 "
Hancock Branch	North End Union, 20 Par- menter st.	" \$2,300 "

HIRED BUILDINGS. — *Concluded.*

NAME.	Location.	Remarks.
Hancock Branch.....	Lewis Block, 115-121 Salem st.	Rent, \$1,200 per annum.
Ellot and Hancock Branches.....	Moon st.	" \$5,940 "
Lowell Branch.....	Workingmen's building, Centre st., Roxbury	" \$600 "
Lowell Branch.....	341 Centre st., J. P.	" \$480 "
Wells Branch.....	31 No. Russell st., Presbyterian Chapel.....	" \$1,800 " (Vacated Apr. 1, 1898.)
Wells Branch.....	23 Chambers st.	Rent, \$800 per annum. One-half cost of gas used. (Vacated Apr. 1, 1898.)
Thomas N. Hart Branch..	484 E. Fourth st., S. B.....	Rent, \$400 per annum.
Christopher Gibson Branch.....	323 Washington st., Dorchester	" \$360 "
Kindergarten	38 Chambers st.....	" \$600 " (Vacated Apr. 1, 1898.)
Kindergarten	7 Byron ct., Roxbury.....	Rent, \$360 per annum.
Kindergarten	Unity Chapel, Washington Village, South Boston	" \$300 "
Kindergarten	Kettell building, 34 Adams st., Dorchester.....	" \$540 per annum, and water rates. (Vacated Apr. 1, 1898.)
Kindergarten.....	32 Parmenter st.	Rent, \$500 per annum.
Kindergarten	65 George st., Roxbury.....	" \$360 " (Vacated Apr. 1, 1898.)
Kindergarten	Centre-st. Church, Jamaica Plain.....	Rent, \$500 per annum.
Kindergarten.....	East Fourth st., South Boston	" \$480 "
Kindergarten.....	166 Lauriat ave., Dorchester,	" \$180 "
Kindergarten.....	Greenwood Hall, Dorchester,	" \$720 "
Kindergarten.....	Boylston Chapel, Charles-town	" \$300 "
Kindergarten.....	370 Warren st., Roxbury	" \$600 "
Kindergarten.....	766 Huntington ave., Roxbury	" \$780 "
Manual Training School..	Eliot st., Jamaica Plain.....	" \$300 "
Manual Training School..	E st., South Boston.....	" \$1,900 "
Evening Drawing School,	Stevenson's Block, Central sq., East Boston	" \$940 "
Evening Drawing School,	170 Columbus ave.	" \$1,300 "
Kindergarten	4 Maywood st.	" \$600 "
George Putnam Branch...	604, 606 and 608 Dudley st. ...	" \$1,440 "
Emerson District	348 and 350 Meridian st.....	" \$900 "
Girls' Latin School.....	Chauncey Hall.....	" \$5,000 " and taxes.

WARD-ROOMS.

The following list will show the location of the various ward-rooms in this city:

Ward.	Buildings.	Location.
1.....	Chapman school-house.....	Eutaw street.
2.....	Armory building.....	Maverick street.
3.....	Old Winthrop school-house.....	Bunker Hill street, Charlestown.
4.....	Bunker Hill Grammar school-house.	Baldwin street, Charlestown.
5.....	Harvard Grammar school-house.....	Devens street, Charlestown.
6.....	Ware Primary school-house.....	North Bennet street.
7.....	Pierpont school-house	Hudson street.
8.....	Wells school-house.....	Blossom street.
9.....	Old Franklin school-house	Washington street.
10.....	Rice school-house.....	Appleton street.
11.....	Prince school-house	Exeter street.
12.....	School-house.....	West Concord street.
13.....	Spellman Hall.....	West Broadway.
14.....	Gray's Hall....	East Broadway.
15.....	Court-room, South Boston	Dorchester and W. Fourth streets
16.....	Winthrop Hall	Upham's Corner.
17.....	Old church building.....	Dudley street.
18.....	Old bath-house	Cabot street.
19.....	Old pumping-station	Elmwood street.
20.....	Ward-room building	Meeting House Hill.
21.....	Dudley-street Opera House.....	Dudley street.
22.....	Tomfohrde Hall ..	Boylston Station.
23.....	Minton Hall.....	Forest Hills Station.
24.....	Dorchester Hall.....	Field's Corner, Dorchester.
25.....	Old Town Hall	Washington street, Brighton.

OFFICE OF REPAIR DIVISION, 8 PLYMPTON ST.,

February 1, 1899.

JOHN DROHAN, ESQ.,

Superintendent of Public Buildings:

DEAR SIR, — I present herewith the first annual report of the Repair division for the year ending January 31, 1899:

The division was organized on January 12, 1898, and was given the old battery building on Plympton street as headquarters, on which the division made extensive alterations to fit it up as workshops in the various trades. Part of the building was set apart for the Electrical Construction Division, and was fitted up for them by this division.

The division has done work for the various city departments, as follows, since its organization, viz.:

Public Buildings Department:

Different bills charged to Public Buildings Department . . .	\$2,392 65	
Alterations of old armory and engine-house on Harrison avenue	22,595 70	
City Hall	3,065 14	
Mayor's office, City Hall	1,447 29	
City Clerk's office, City Hall	3,649 92	
Clerk of Committees' office, City Hall	852 92	
Old Court House	1,032 23	
Old State House	269 57	
Old Public Library	737 02	
Faneuil Hall	1,604 50	
Probate Building	356 81	
Armories	273 55	
Ward-rooms	2,709 92	
Band-stands	1,335 29	
Electrical Construction Division	3,240 02	
		\$45,562 53

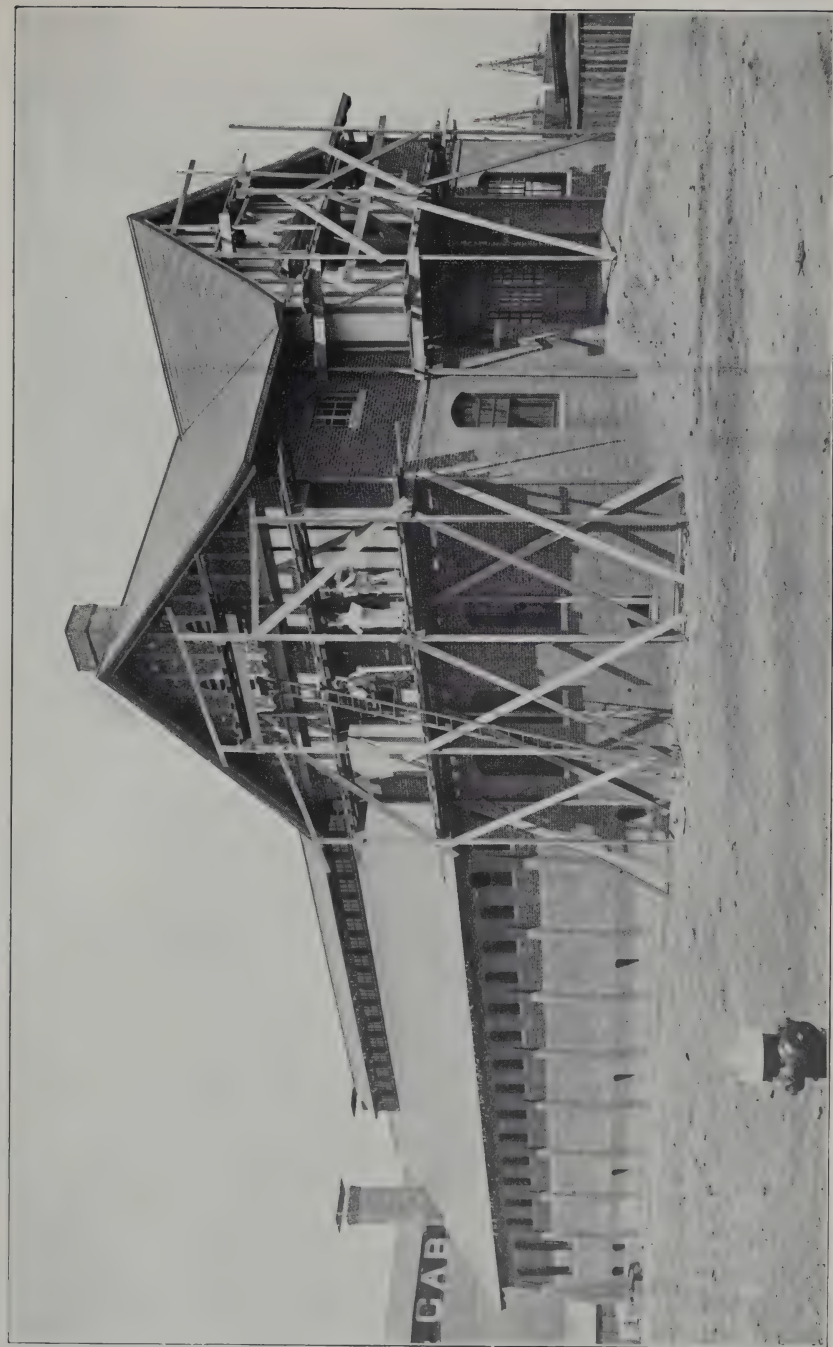
Baths Department:

Office, public grounds and general bills	\$5,979 62
East Boston Gymnasium	593 94
Commercial Point bath-house	1,300 29

<i>Carried forward</i>	\$7,873 85		\$45,562 53
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CITY CLERK'S OFFICE.



VETERINARY HOSPITAL, SWETT STREET.



INTERIOR VIEW OF VETERINARY HOSPITAL, FIRE DEPARTMENT, SWETT STREET.

<i>Brought forward</i> . . .	\$7,873 85	\$45,562 53
Jeffries Point bath-house . .	298 32	
Work performed at yard of Bath Commissioners at Meri- dian-street bridge . . .	7,044 84	
Fire Department, repairs shop,	446 95	
Border-street bath-house . .	708 05	
Craigie bridge " . . .	182 75	
Bunker Hill Park " . . .	1,662 27	
L-street " . . .	5,269 88	
Chelsea-street bridge " . .	1,346 52	
Dover-street " . . .	740 06	
Cabot-street " . . .	2,316 00	
Neponset " . . .	719 74	
North End Park " . . .	3,483 08	
West Boston bridge " . . .	368 11	
Warren bridge " . . .	290 70	
Orchard Park " . . .	1,607 59	
Malden bridge " . . .	177 71	
Spring-street " . . .	2,370 82	
Harvard bridge " . . .	1,051 12	
Commonwealth Park " . .	6,281 55	
Ward 15 " . . .	35 46	
		44,275 37

Fire Department:

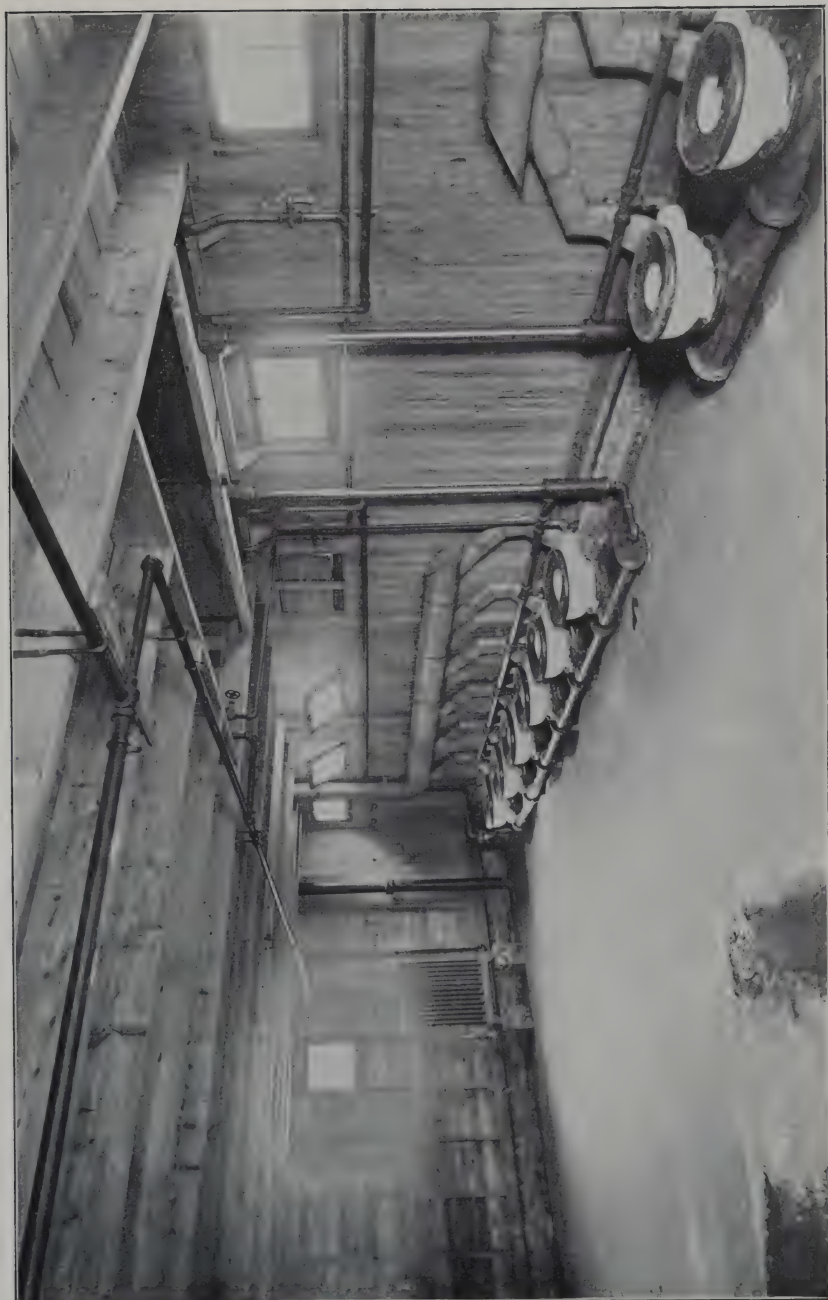
General Bills	\$92 41	
Engine 2	33 80	
" 3	27 38	
Chemical 4	27 50	
Engine 5	38 94	
" 6	31 60	
Chemical 8	15 98	
Engine 10	35 10	
Ladder 12	1,884 92	
Engine 21	5,982 10	
" 23	10 84	
" 25	15 10	
" 26	14 25	
" 33	39 28	
" 36	113 70	
" 37	22 00	
" 43	123 81	
" 45	62 51	
Veterinary Hospital . . .	6,941 71	
		15,512 93

Carried forward \$105,350 83

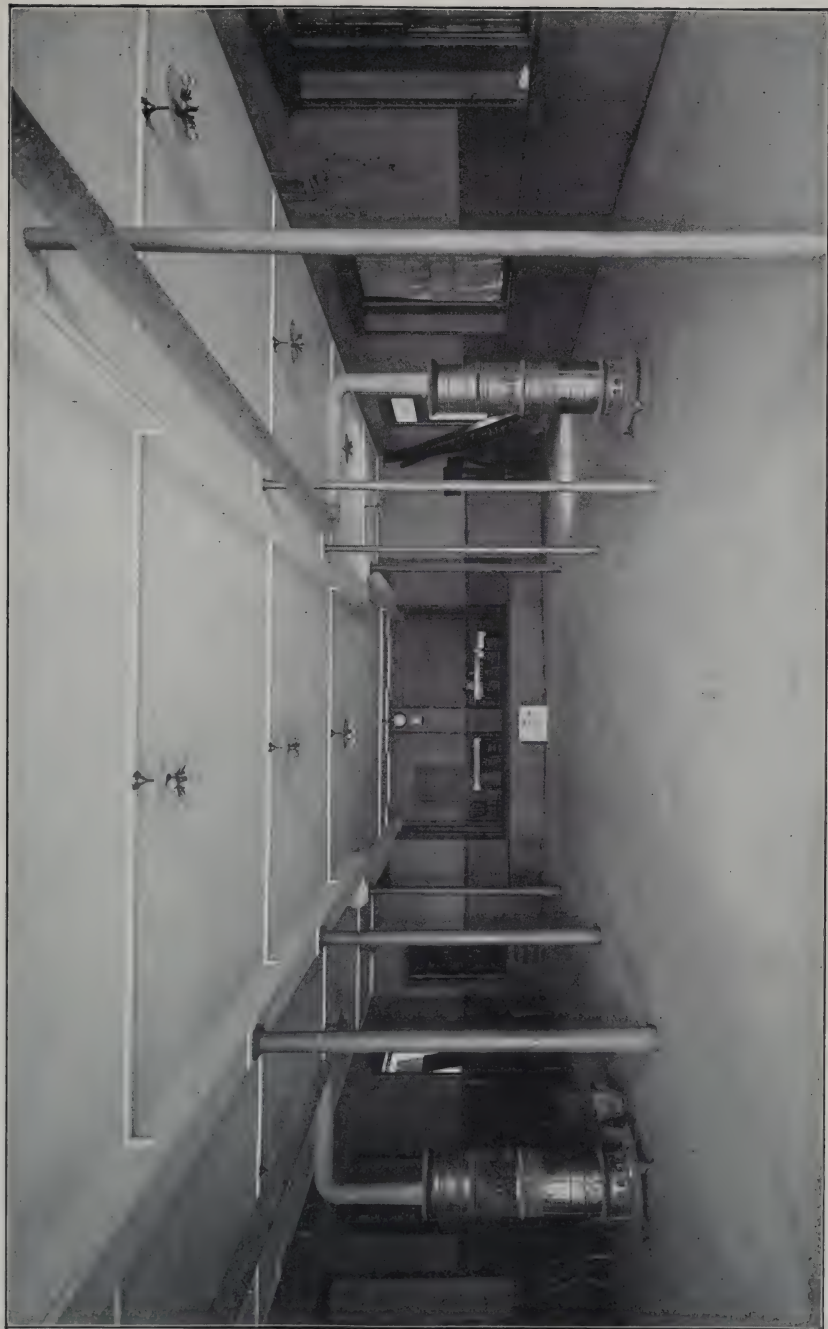
<i>Brought forward</i>		\$105,350 83
Street Department:		
Office, etc.	\$432 68	
Surveyors Division	148 72	
Permit office	30 33	
Watering Division	237 70	
Inspectors of Smoke	27 09	
Inspectors office	3 00	
Bridge Division	6 71	
Sewer Division	10,368 43	
Paving Division	1,878 32	
Street Laying-out	571 38	
Sanitary Division	1,259 18	
Street Cleaning	187 32	
		15,150 86
Street Commissioners Department:		
Office, etc.	\$95 66	
Surveying Division	818 58	
Inspectors' booths	966 74	
Lines and grades	63 89	
Appropriations for public lands,	143 70	
		2,088 57
Board of Election Commissioners,		12,066 69
Suffolk County:		
Court of Registration	\$554 44	
New Court House	3,089 83	
City Prison	112 21	
Charles-street Jail	1,444 62	
South Boston Municipal Court,	21 19	
Roxbury " "	53 92	
Charlestown " "	27 76	
Dorchester " "	26 68	
		5,330 65
Wire Department		702 27
Board of Health		189 49
Music Commission		500 03
City Engineering Department:		
Engineering Department . . .	\$454 45	
Architectural Division	544 18	
		998 63
Public Library		1,452 74
<i>Carried forward</i>		\$143,830 76



PIER AT RAINSFORD ISLAND.



TOILET-ROOM, RAINSFORD ISLAND.



WARD 3 WARD-ROOM.

<i>Brought forward</i>	\$143,830 76	
Children's Institutions Department:		
Office	\$759 96	
Rainsford Island	14,632 66	
Marcella-street Home	483 78	
Parental School	515 70	
		16,392 10
Pauper Institutions Department:		
Office, etc.	\$49 53	
Charlestown Almshouse	1,794 08	
Long Island	989 70	
		2,833 31
Penal Institutions Department:		
Office, etc.	\$123 54	
Deer Island	614 06	
		737 60
Public Institutions Department		14 42
Hospital Department:		
City Hospital		6,968 60
Insane Hospital Department:		
Austin Farm	\$1,226 73	
Pierce Farm	1,922 45	
		3,149 18
Overseers of the Poor Department:		
Chardon-street Home	\$1,022 91	
Charity Building	691 16	
Wayfarers' Lodge	327 79	
		2,041 86
Fourth of July Committees		619 47
City Council, Incidental Expenses, ...		827 36
City Messenger Department		137 64
Printing Department		7 44
Water Department		333 03
Park Department		6,336 43
Board of Police		64 96
Municipal Statistics Department		155 64
		<u>\$184,449 80</u>

Almost all of this work has been done on the basis of 10 per cent. over the net cost of material and labor, and out of this 10 per cent. and the profit made on some work on which estimates had been given the division has paid all its expenses and made a net profit of \$11,922.66.

Estimates have been given in many cases against outside contractors, and were nearly always lower, thus showing that

the city can save money by having repairs done by this division.

The quality of work done is of the very best, as none but first-class mechanics are employed, and the division is to-day in a position to execute any work which it may be called upon to perform.

The prices per day charged to other departments for the various mechanics are as follows :

Carpenters	\$2 70 and \$3 00	per day
Plumbers with one helper	5 25	" "
Painters	3 00	" "
Glaziers	3 00	" "
Furniture-polishers	3 00	" "
Letterer	3 00	" "
Decorator	3 00	" "
Steam-fitter	3 75	" "
Steam-fitters' helper	2 50	" "
Masons	3 60	" "
Masons' tenders	2 25	" "
Bricklayer	3 60	" "
Bricklayers' tenders	2 25	" "
Roofers	3 00	" "
Roofers' helpers	2 25	" "
Plasterers	3 44	" "
Plasterers' tenders	2 50	" "
Blacksmiths	3 00	" "
Cabinet-makers	3 00	" "
Granite-cutter	3 04	" "
Laborers	2 00	" "
Machine work in shops, per hour	60	

Among some of the principal jobs are the following :

Heating and plumbing of Laundry Building, City Hospital (the character of which work was highly commended by the Superintendent); foundations and finishing of Veterinary Hospital for Fire Department; Wood Island bath-house; floating bath-house, located at Harvard bridge, and said to be the finest in the country, was built by this division at a cost of \$3,500, which is \$500 less than has been paid for the old style floating-baths; gymnasium at Commonwealth park; alteration of Mayor's and City Clerk's offices; alteration of Ladder 12; building of twenty wooden booths for the Election Commissioners at less than \$200 each; extensive alterations at House of Reformation, Rainsford Island, and rebuilding of bridge and wharf, carried away by



GYMNASIUM, WARD 13.



INSIDE VIEW OF GYMNASIUM, WARD 13.

storm of November 27; alterations at Austin and Pierce Farms and building coal run at Pumping Station.

Efforts have been made by the division to obtain some of the repairs on school buildings, but so far have been unsuccessful. I feel certain that if the division was given a chance at this work we could save money for the School Committee, and I have hopes that later on we may be given at least a trial to show what we can do.

The difficulties which this division has had to encounter by reason of strong opposition from various sources have been pretty well overcome, and to-day it is in a healthy and prosperous condition.

FINANCIAL STATEMENT.

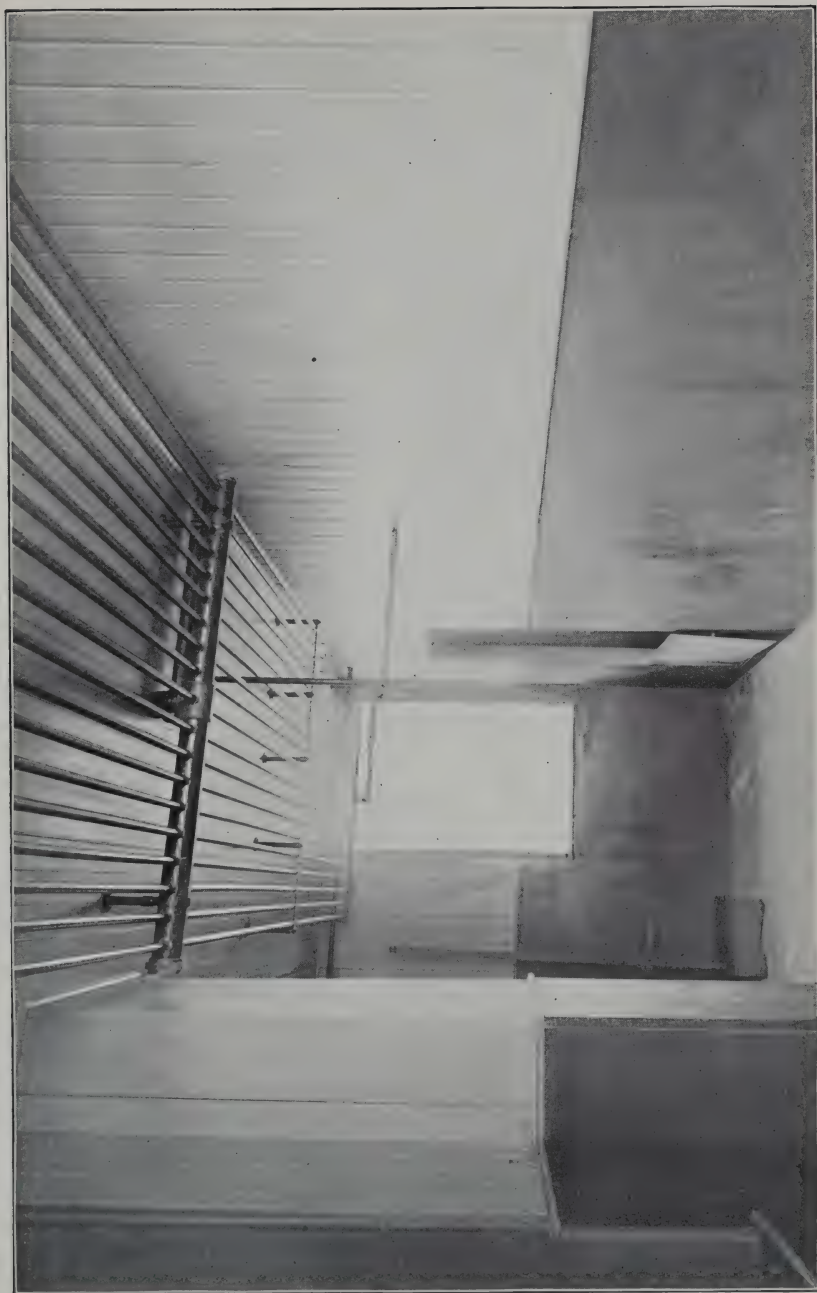
Expenditures.

Amount of pay-rolls		\$88,573 95
Stock bought:		
Lumber and hardware	\$34,009 14	
Plumbers' material	7,611 55	
Heating apparatus	9,080 98	
Gas fixtures and supplies	1,240 07	
Brick, cement, mortar, etc.	4,528 48	
Stone, marble, floor slabs, etc.	5,091 12	
Piles and driving same	3,697 04	
Plastering	2,011 84	
Paint, oil, glass and putty	3,519 29	
Roofing	1,990 37	
Iron-work	2,868 66	
Machinery and tools	9,149 64	
Horses, harnesses, wagons, etc.	1,496 33	
Horse-keeping and horseshoeing, ...	1,071 33	
Teaming	2,137 50	
Car tickets	1,453 00	
Furniture, fixtures, etc.	1,902 41	
Fuel	655 49	
Stationery and printing	931 38	
Electric lights	247 47	
Telephone	143 78	
Cleaning and supplies	132 00	
Water	333 00	
Curtains and awnings	393 00	
Lanterns and reflectors	267 65	
Flag-poles and flag-staffs	428 18	
Moving buildings	462 10	
<i>Carried forward</i>	<i>\$96,852 80</i>	<i>\$88,573 95</i>

<i>Brought forward</i>	\$96,852 80	\$88,573 95
Canvas	125 00	
Rent of storehouse	450 00	
Mast and spars	888 00	
Towing	610 35	
Empty casks and barrels	348 75	
Wharfage	21 00	
Advertising	13 88	
Insurance	2,194 32	
Sundries	135 37	
		101,639 47
Total expenditures		<u>\$190,213 42</u>
Work performed for the different departments of the city for which bills have been sub- mitted for collection		\$184,449 80
Collected on bills submitted for collection		123,488 61
Balance due		<u>\$60,961 19</u>
TOTAL RECEIPTS TO JANUARY 31, 1899.		
Amount paid for labor		\$88,573 95
Amount paid for stock :		
Lumber and hardware	\$7,885 96	
Plumbers' material	1,333 46	
Heating apparatus	5,235 42	
Gas fixtures and supplies	280 50	
Brick, cement, mortar, etc.	2,623 86	
Stone, marble, floor-slabs, etc.	1,558 07	
Piles and driving same	874 93	
Plastering	1,795 55	
Paint, oil, glass and putty	1,651 57	
Roofing	959 20	
Iron-work	648 83	
Machinery and tools	3,780 80	
Horses, harnesses, wagons, etc., ...	817 00	
Horse-keeping and horseshoeing, ...	922 55	
Teaming	648 20	
Car tickets	200 00	
Furniture, fixtures, etc.	479 17	
Fuel	128 54	
Stationery and printing	489 22	
Electric lights	186 97	
Telephone	65 47	
<i>Carried forward</i>	\$32,565 27	\$88,573 95



FOUNDATION OF NEW BATH-HOUSE, EAST 9TH ST., WARD 15.



SHOWER BATH, RAINSFORD ISLAND.

<i>Brought forward</i> . . .	\$32,565 27	\$88,573 95
Cleaning and supplies . . .	132 00	
Water	29 00	
Curtains and awnings . . .	97 76	
Flag-poles and flag-staffs . .	67 10	
Moving buildings	350 00	
Canvas	125 00	
Rent of storehouse	450 00	
Spars and masts	80 00	
Towing	76 35	
Empty casks and barrels . . .	222 90	
Wharfage	10 00	
Advertising	13 88	
Insurance	695 40	
		34,914 66
		\$123,488 61
Balance due for tools, machinery and stock,		66,724 81
		<u>\$190,213 42</u>

ASSETS OF THE DIVISION.

Assets and Liabilities.

Assets:

Due Repairs Division, on bills rendered	\$60,961 19	
Lumber and hardware, on stock,	3,696 93	
Plumbers' material on stock . .	1,054 58	
Heating apparatus on stock . .	274 89	
Paint, oil, glass and putty, on stock	848 52	
Roofer's material, on stock . .	84 35	
Mason's material, on stock . .	12 43	
Canvas	\$125 00	
Machinery and tools, 10,954 30		
Horses, harnesses, wagons, etc.	1,179 40	
Office furniture and fixtures	757 50	
		\$13,016 20
Ten per cent. off for wear, etc.	1,301 62	
		11,714 58
		\$78,647 47
<i>Carried forward</i>		\$78,647 47

<i>Brought forward</i>	\$78,647 47
Liabilities:	
Due by Repairs Division on stock, machinery and tools, as per statement following,	66,724 81
Profit	<u>\$11,922 66</u>
Lumber and hardware . . . \$26,123 18	
Plumbers' material . . . 6,278 09	
Heating apparatus . . . 3,845 56	
Gas fixtures and supplies . . . 959 57	
Brick, cement, mortar, etc. . . 1,904 62	
Stone, marble, floor slabs, etc. . . 3,533 05	
Piles and driving same . . . 2,822 11	
Plastering 216 29	
Paint, oil, glass and putty . . . 1,867 72	
Roofing 1,031 17	
Iron-work 2,219 83	
Machinery and tools . . . 5,368 84	
Horses, harnesses, wagons, etc., . . . 679 33	
Horse-keeping and horseshoeing, . . . 148 78	
Teaming 1,489 30	
Car tickets 1,253 00	
Furniture, fixtures, etc. . . 1,423 24	
Fuel 526 95	
Stationery and printing . . . 442 16	
Electric lights 60 50	
Telephone 78 31	
Water 304 00	
Curtains and awnings . . . 295 24	
Lanterns and reflectors . . . 267 65	
Flag-poles and flag-staffs . . . 361 08	
Moving buildings 112 10	
Spars and masts 808 00	
Towing 534 00	
Empty casks and barrels . . . 125 85	
Wharfage 11 00	
Insurance 1,498 92	
Sundries 135 37	
	<u>\$66,724 81</u>

RECAPITULATION.

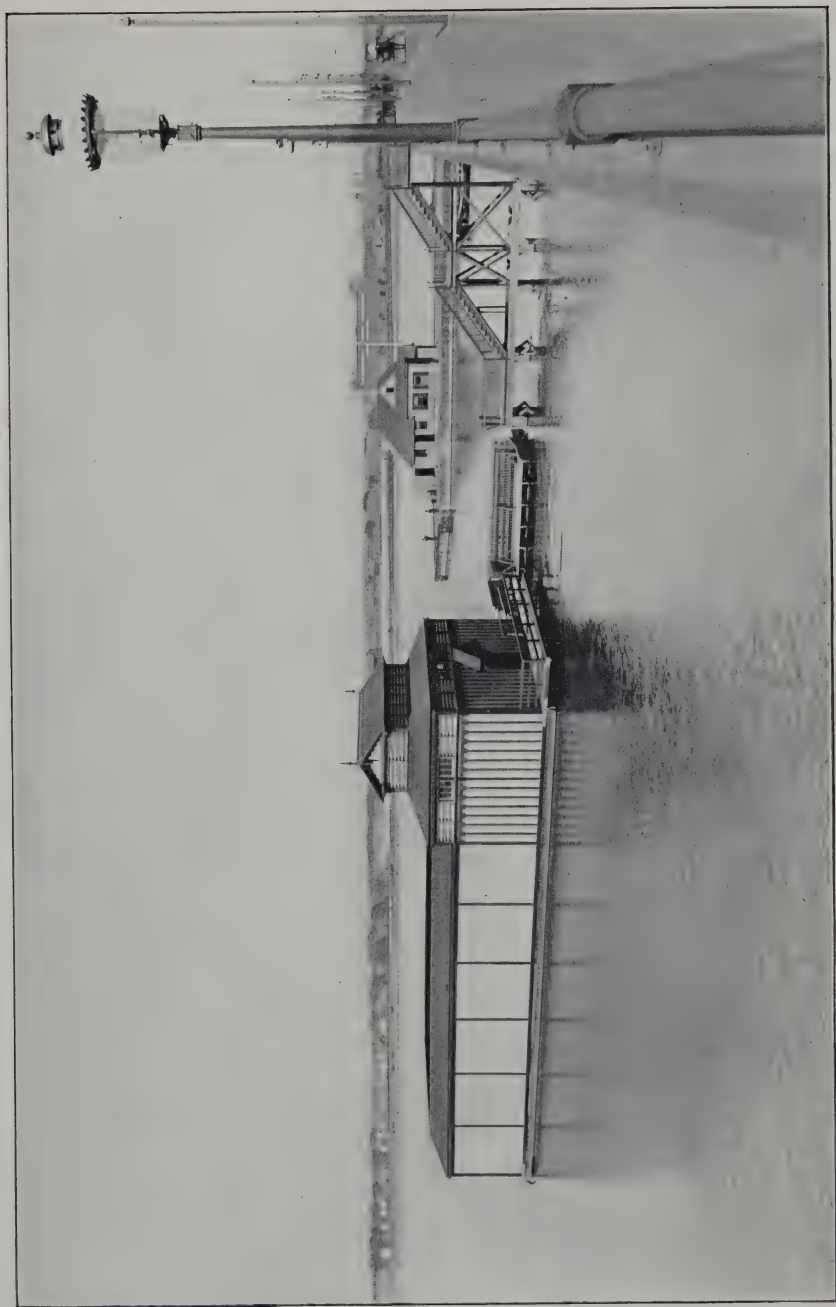
	Liabilities.	Assets.
Total receipts for the year . . .		\$123,488 61
Balance due the Division . . .		60,961 19
<i>Carried forward</i>		<u>\$184,449 80</u>



INTERIOR VIEW NEW BATH-HOUSE.



WOOD ISLAND BATH-HOUSE.



NEW BATH-HOUSE, HARVARD BRIDGE.

	Liabilities.	Assets.
<i>Brought forward</i> . . .		\$184,449 80
Stock and machinery and tools, less 10 per cent. . . .		17,686 28
Pay-roll	\$88,573 95	
Stock	101,639 47	
Profits	11,922 66	
	<u>\$202,136 08</u>	<u>\$202,136 08</u>

Respectfully submitted,

CHARLES LOGUE,

*Chief of the Repair Division,
Public Buildings Department.*

OFFICE OF ELECTRICAL CONSTRUCTION DIVISION OF PUBLIC BUILD-
INGS DEPARTMENT, NO. 11 WAREHAM STREET,

February 1, 1899.

MR. JOHN DROHAN,

Superintendent of Public Buildings:

DEAR SIR,— I present herewith a report of the business done by the Electrical Construction Division for the year ending January 31, 1899:

DEBIT.

To appropriation for Electrical Construction	
Division, year 1898-99	\$20,000 00
" Stock on hand, February 1, 1898	11,664 37
" Accounts on hand, February 1, 1898 (un- finished)	15,273 22
" Expenditures for material	38,623 37
" Expenditures for labor	38,862 17
	\$124,423 13

CREDIT.

By bills submitted for collection	\$78,660 11
" Accounts on hand, January 31, 1899	5,680 96
" Stock on hand, January 31, 1899	17,577 09
" Expenses of Division	19,786 59
" Profit and loss	2,718 38
	\$124,423 13

EXPENDITURES.

Salaries	\$38,862 17
Wires, cables, etc.	11,988 90
Printing and stationery	717 89
Gas and electrical fixtures	3,824 87
Carpenter work and stock, including all moulding and hardware	1,615 33
Car and railway fares	1,293 90
Telephone service	94 07
Teaming	593 89
Typewriting	54 75
Iron work and general supplies	2,283 77
Mason work	535 45
Motors	182 44

<i>Carried forward</i>	\$62,047 43
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ELECTRICAL CONSTRUCTION DIVISION.—HEADQUARTERS, No. 11 WAREHAM STREET.



ELECTRICAL CONSTRUCTION DIVISION.—GENERAL OFFICE

<i>Brought forward</i>	\$62,047 43
Horse-keeping, carriages, etc.	621 05
Electric light plant, engines and dynamos	7,606 54
Telephones and fixtures	1,472 74
Painting and glazing	58 53
Lamps	2,087 15
Electric light supplies	880 81
Fire-alarm boxes	1,554 15
Arc-lamp supplies	726 33
Furniture	357 81
Miscellaneous	73 00
	\$77,485 54

Detailed statement for work in the several departments :

Assessor's Department	\$25 53
Architects' Division	49 71
Associated Charities	11 25
Atlantic Works	7 02
Bath Department	3,036 33
City Hospital	11,581 07
City Messenger	9 69
City Clerk	41 34
City Temporary Home	4 75
Clerk of Committees	18 26
Children's Institutions	173 40
City Collector's	41 69
Department of Municipal Statistics	34 08
Election Department	183 73
Engineer's Department	148 42
Fire Department	11,295 64
Health Department	211 18
Insane Hospital	44 41
Lamp Department	383 28
Market Department	188 12
Music Commission	50 63
Overseers of the Poor	51 05
Public Library	6,556 78
Police Department	5 19
Park Department	5,283 44
Public Grounds Department	150 39
Printing Department	50 33
Pauper Institutions	965 44
Penal Institutions	948 32
Public Buildings	8,994 03
Repairs Division	8,065 20

Carried forward \$58,609 70

<i>Brought forward</i>	\$58,609 70
Suffolk County Court House	121 17
Sealer of Weights and Measures	2 74
School Committee	775 01
Street Commissioners	337 26
Street Laying Out Department	3 08
Surveying Division	70 90
Street Department	178 20
Paving Division	34 62
Street Cleaning Division	17 52
Ferry Division	8,666 84
Sewer Division	6,406 69
Bridge Division	190 53
Wayfarers' Lodge	8 66
Water Department	418 24
Wire Department	385 98
Miscellaneous	325 02
Telephones	2,107 95
	\$78,660 11

The sum of \$20,000 was appropriated for current expenses of this division for the year 1898.

Of this amount \$19,786.59 has been expended, leaving a balance of \$213.42.

This expense of \$19,786.59 covers, beside the usual office expenses, the cost of maintaining a system of inspection and testing of wiring and apparatus owned by the city, including tests for electrolysis in the subway.

And also the expense of preparing and moving into new quarters at No. 11 Wareham street.

In my last report I called attention to the advisability of maintaining a careful system of inspection and records of the city's electrical apparatus, and this work has been carried on during the past year with excellent results, and much valuable information has been obtained and many defects corrected. Unfortunately this work cannot be continued this year owing to lack of appropriation.

On November 1, 1898, attention was directed by the Transit Commission to liability of damage to the subway by electrolysis.

Complete and thorough examinations have been made by this division, showing that the leakage at the present time is very slight, and not liable to do damage unless neglected and allowed to increase.

As this leakage may become serious at any time, and may be disastrous to the structure, I recommend that provision be made for a continuance of the work.



ELECTRICAL CONSTRUCTION DIVISION.—STOCK ROOM.



ELECTRICAL CONSTRUCTION DIVISION.—MACHINE-SHOP.

On April 6, 1898, the division moved into its new quarters at No. 11 Wareham street, and now has an excellently equipped electrical construction stock-room and office.

Many of the city departments have availed themselves of the services of this division in the preparation of plans and specifications for electrical work, such plans and specifications having been furnished free of expense.

Principal among the above are the following:

Boston Public Library. — Extensive alterations in lighting, the addition of an electric elevator, an electric book hoist, three ventilating fans, and miscellaneous work.

Boston City Hospital. — Plans for lighting the new laundry building.

Rainsford Island. — Plans for an electric plant, capacity 350 lights.

Faneuil Hall. — Plans for installing a new lighting system and ventilating motors.

Bath Department. — Plans for lighting the Dover-street Bath-house and D-street Gymnasium.

Insane Institutions Department. — Plans and estimate for lighting the Austin and Pierce Farms.

City Hall. — Estimate for electric lighting plant for City Hall and Old Court House.

Pauper Institutions Department. — Plans and estimate for enlarging and moving electric plant.

Street Department. — Plans for electric plant for ferry-boat "Noddle Island." Plans for electric plant at Main Drainage Works, Old Harbor Point.

New electric plants have been installed as follows:

Main Drainage Station. — Old Harbor Point. One engine and generator for 125 incandescent and twenty-eight arc lamps.

Repairs Division and Electrical Construction Division. — Plympton and Wareham streets. One engine and generator for 150 incandescent and four arc lamps and six motors. (Motors used to drive all machinery in both divisions.)

Ferry-boat "Governor Russell." — Two engines and generators for 150 incandescent lamps.

Ferry-boat "Noddle Island." — One engine and generator for 150 incandescent lights.

As in previous years it has been the policy of this division to do all work in the best possible manner, and I feel confident that an inspection of our work will bear me out in the claim that the city of Boston is getting as good, if not a better class of electrical work than any city in the country.

The following is a list of the electrical plants owned and operated by the city, all of which come under the supervision of this division:

LIST OF ELECTRIC PLANTS OPERATED BY THE CITY.

LOCATION.	Incand. Lights.	Arc Lights.	Motors.	Boilers.	Engines.	Dynamos.	Capacity in Elec. H.P.	Installed by	Date.
City Hospital	4,000	20	6	9	3	3	321.7	Electrical Construction Division	1897
Public Library	3,300	.....	20	3	3	3	301.	General Elec. Co. and Siemens & Halske Co..	1895
House of Correction, Deer Island.....	1,000	4	.....	1	1	1	100.5	Electrical Construction Division.....	1896
Alms house, Long Island	1,000	.....	5	4	3	3	48.	J. S. Potter and C. & C. Electrical Co.....	1892
Marine Park, City Point	181	.....	1	2	1	1	20.	Hawkes Electrical Co.....	1895
Fire Department, Bristol street	151	.....	.....	2	2	2	30.	Godfrey Electrical Co.	1894
Repairs Division	150	4	6	1	1	1	53.	Electrical Construction Division	1898
Main Drainage Station, Old Harbor Point.....	125	28	.....	.....	1	1	26.	" " " "	1898
Steamer "Noddle Island"	150	.....	.....	2	1	1	13.	" " " "	1899
" "Guardian"	60	1	.....	1	1	1	4.	" " " "	1896
" "General Hancock"	48	.....	.....	1	1	1	5.	Edison Co.	1897
" "Winthrop"	81	.....	.....	1	1	1	6.	Electrical Construction Division.....	1897
" "Revere"	81	.....	.....	1	1	1	6.	" " " "	1897
" "D. D. Kelley"	81	.....	.....	1	1	1	6.	" " " "	1897

Yours respectfully,

H. F. COTTLE,

Chief of Electrical Construction Division.



ANNUAL REPORT
OF THE
PUBLIC GROUNDS DEPARTMENT
FOR THE YEAR 1898.

CITY OF BOSTON, PUBLIC GROUNDS DEPARTMENT,
CITY GREENHOUSES, EAST COTTAGE STREET,
DORCHESTER, January 31, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston:

DEAR SIR,— In compliance with the Revised Ordinances, I herewith submit my annual report of the expenditures of the Public Grounds Department for the year beginning February 1, 1898, and ending January 31, 1899.

I beg to remain

Your obedient servant,

WM. DOOGUE,
Superintendent.

PAYMENTS FOR EXPENSES UNDER THE GENERAL APPROPRIATION
FOR THE YEAR BEGINNING FEBRUARY 1, 1898, AND ENDING
JANUARY 31, 1899.

General Expenses.

Salary, Superintendent . . .	\$4,000 00
Salary, Assistant Superintendent . . .	2,000 00
<i>Carried forward,</i>	<u>\$6,000 00</u>

<i>Brought forward,</i>	\$6,000 00
Labor, removing snow from walks in parks and squares	5,489 35
Hay, grain, etc.	\$613 40
Shoeing, etc.	222 25
Veterinary services and med- icines	110 34
	945 99
Freight, express and foreign charges, etc.	849 97
Tools and repairs	\$760 59
Rent for storage of tools	20 00
	780 59
Water-rates	605 00
Teaming plankwalks	600 00
Repairs on harnesses and vehicles	596 05
Flower pots, tubs, etc.	510 61

Rent of Playgrounds.

Brighton	\$350 00
Nightingale field	150 00
	500 00
Car-fares for employés	482 50
Hardware	419 43
Court execution	366 92
Repairing plankwalks	355 76
Two horses purchased	300 00
Telephone service	293 75
Small supplies, paints, etc.	253 83
Hose and repairs	173 55
New harnesses, rubber tire, and re- setting tire	134 00
Lawn mowers and repairs	98 65
Teaming settees	75 00
Claim, Louis J. Marshall	75 00
Rubber boots	30 60
Veterinary treatment of watch-dog	17 00
	\$19,953 55

Office.

Labor	\$1,500 00
Stationery and printing	137 51
Clerical service	50 00
Cleaning office	19 00
Picture frames	7 00
Repairing chairs	3 25
Repairing clock	1 50
	1,718 26
<i>Carried forward,</i>	
	\$21,671 81

Street Trees.

<i>Brought forward,</i>		\$21,671 81
Labor	\$7,803 57	
Teaming	167 00	
Repairing damages to fence	14 39	
Rope	11 44	
Permit	6 00	
		8,002 40

Greenhouses.

Labor	\$5,130 77
Coal	2,717 96
Plants	629 02
Manure	568 09
Repairing heating apparatus	312 45
Water-rates	303 60
Teaming	245 00
Lumber	231 51
Loam	77 69
Roofing shed	75 00
Ashes	58 00
Seed	57 14
Leaf mould	50 00
Plumbing repairs	46 13
Sand and lime	39 40
Glass	34 81
Sod	28 00
Electric lighting	19 20
Screened gravel	14 00
Charcoal	12 25
Towel supply	12 00
Painting smokestack	8 00
Electrical repairs	7 13
Repairing gate	4 87
Spagnum moss	4 50
Tobacco stems	4 00
	\$10,690 52

Storage Lot.

Labor and teaming	365 00	
		11,055 52

Nursery and Cold Frames.

Labor	\$2,590 41	
Rent of land	225 00	
Loam	219 22	
<i>Carried forward,</i>	\$3,034 63	\$40,729 73

<i>Brought forward,</i>	\$3,034 63	\$40,729 73
Manure	201 27	
Shrubs	166 51	
Lumber	133 91	
Hay for covering	36 68	
		3,573 00

Common.

Labor	\$8,810 28
Concrete work	1,769 87
Teaming	988 50
Sod	393 84
Grass-seed	313 86
Lumber	183 41
Loam	122 83
Manure	43 00
Clay	42 00
Fence poles	36 00
Cleaning	33 00
Coal	30 76
Inlaid tile for office	26 83
Towel supply	19 60
Iron repairs	19 32
Electric lighting	16 16
Sand	14 00
Plumbing repairs	12 00
Ashes	2 00
	\$12,877 26

Cleaning out Pond.

Labor	\$350 00
Teaming	184 50
	534 50

Band-stand.

Laying electric cable, etc.	\$226 56	
Installing 4 arc lamps, etc.	147 95	
Electric lighting	18 36	
Lumber	4 94	
		397 81
		13,809 57

Public Garden.

Labor	\$10,008 96
Bulbs	1,026 22
Roses and lilies	856 45
Teaming	638 50

<i>Carried forward,</i>	\$12,530 13	\$58,112 30
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<i>Brought forward,</i>	\$12,530 13	\$58,112 30
Loam	317 49	
Lumber	303 76	
Red gravel	276 50	
Plants	191 95	
Repairing bridge	182 06	
Sod	111 18	
Repairing iron fence	82 70	
Evergreens	75 00	
Manure	66 40	
Sand	46 61	
Photograph	43 00	
Sheeting	35 27	
Ashes	32 00	
Flower seed	21 20	
Plumbing	10 31	
Repairing vases	10 00	
Grass-seed	2 18	
	\$14,337 74	

Cleaning out Pond.

Removing snow	\$1,250 00	
Labor	475 00	
Teaming	213 50	
	1,938 50	
		16,276 24

Massachusetts Avenue.

Labor	\$652 00	
Manure	65 80	
Teaming	19 50	
Grass-seed	8 70	
Repairing fountain	5 75	
		751 75

Blackstone Square.

Labor	\$527 00	
Manure	97 00	
Grass-seed	13 10	
Teaming	10 00	
Fence poles	5 00	
Sand	1 75	
		653 85

Franklin Square.

Labor	\$533 00	
Manure	97 96	
<i>Carried forward,</i>	\$630 96	\$75,794 14

<i>Brought forward,</i>						\$630 96	\$75,794 14
Grass-seed	.	.	.	.	.	12 00	
Teaming	.	.	.	.	.	10 00	
Fence poles	.	.	.	.	.	5 00	
Sand	.	.	.	.	.	1 75	
							659 71

Worcester Square.

Labor	.	.	.	.	.	\$238 00	
Teaming	.	.	.	.	.	7 50	
							245 50

Concord Square.

Labor	.	.	.	.	.	\$193 00	
Bulbs and plants	.	.	.	.	.	24 50	
Manure	.	.	.	.	.	23 80	
Repairing iron fence	.	.	.	.	.	5 81	
Teaming	.	.	.	.	.	3 00	
Cedar posts	.	.	.	.	.	2 50	
							252 61

Rutland Square.

Labor	.	.	.	.	.	\$193 00	
Bulbs and plants	.	.	.	.	.	20 76	
Manure	.	.	.	.	.	15 19	
Grass-seed	.	.	.	.	.	2 23	
							231 18

Copley Square.

Labor and teaming	.	.	.	.	.	\$970 36	
Bulbs, plants, etc.	.	.	.	.	.	202 00	
Loam	.	.	.	.	.	146 00	
Evergreen	.	.	.	.	.	75 00	
Manure	.	.	.	.	.	40 87	
Sand	.	.	.	.	.	22 75	
Iron pipe	.	.	.	.	.	2 34	
							1,459 32

Union Square.

Labor	.	.	.	.	.	\$235 00	
							235 00

Washington Square.

Labor	.	.	.	.	.	\$110 00	
Bulbs, plants, etc.	.	.	.	.	.	37 66	
Red gravel	.	.	.	.	.	35 00	
Clay	.	.	.	.	.	20 40	
Manure	.	.	.	.	.	9 75	
Teaming	.	.	.	.	.	7 50	
							220 31

Carried forward,

\$79,097 77

City Hall.

<i>Brought forward,</i>							\$79,097 77
Labor	.	.	.	.	.	.	\$165 00
Plants	.	.	.	.	.	.	16 00
							181 00

Park Square.

Labor	.	.	.	.	.	.	\$106 00
Plants	.	.	.	.	.	.	14 00
							120 00

Lowell Square.

Labor	.	.	.	.	.	.	\$141 00
							141 00

Waltham Square.

Labor	.	.	.	.	.	.	\$126 00
							126 00

Berwick Park.

Labor	.	.	.	.	.	.	\$165 00
Bulbs, etc.	.	.	.	.	.	.	16 60
Manure	.	.	.	.	.	.	3 56
							185 16

St. Stephen's Square.

Labor and care	.	.	.	.	.	.	\$58 00
							58 00

SOUTH BOSTON DISTRICT.

Independence Square.

Labor	.	.	.	.	.	.	\$787 00
Sod	.	.	.	.	.	.	90 00
Teaming	.	.	.	.	.	.	17 00
							894 00

Telegraph Hill.

Labor	.	.	.	.	.	.	\$666 00
Sod and grass-seed	.	.	.	.	.	.	409 82
Teaming	.	.	.	.	.	.	34 50
Repairing fence	.	.	.	.	.	.	22 00
Lumber	.	.	.	.	.	.	3 00
							1,135 32

Carried forward,

\$81,938 25

Lincoln Square.

<i>Brought forward,</i>		\$81,938 25
Labor	\$484 00	
Bulbs, plants, etc.	41 30	
Teaming	12 00	
Manure	8 32	
Sand	1 75	
		547 37

EAST BOSTON DISTRICT.

Central Square.

Labor	\$422 00	
Bulbs, plants, etc.	49 80	
Manure	19 82	
Teaming	10 00	
Plumbing repairs	2 13	
		503 75

Belmont Square.

Labor	\$395 00	
Bulbs, plants, etc.	15 64	
Teaming	7 50	
Manure	7 31	
		425 45

Prescott Square.

Labor	\$210 00	
Teaming	5 00	
		215 00

Putnam Square.

Labor	\$220 00	
		220 00

Maverick Square.

Labor	\$332 00	
Bulbs and plants	14 00	
Teaming	5 32	
Manure	3 65	
		354 97

CHARLESTOWN DISTRICT.

City Square.

Labor	\$355 00	
Bulbs, plants, etc.	38 30	
<i>Carried forward,</i>	\$393 30	\$84,204 79

<i>Brought forward,</i>	\$393 30	\$84,204 79
Manure	8 38	
Teaming	6 00	
Sand	1 75	
		409 43

Winthrop Square.

Labor	\$397 00	
Sod	136 80	
Bulbs, plants, etc.	41 00	
Teaming	32 00	
Repairing iron fence	14 38	
Manure	11 94	
Sand	1 75	
		634 87

Sullivan Square.

Labor	\$410 00	
Teaming	49 71	
Sod	85 59	
Ashes	61 00	
Loam	8 00	
		614 30

Bunker Hill Square.

Labor	\$80 00	
		80 00

Essex Square.

Labor	\$245 00	
		245 00

DORCHESTER DISTRICT.

Meeting House Hill.

Labor	\$265 00	
Grass-seed	13 95	
Teaming	10 00	
Manure	4 57	
Loam	3 00	
		296 52

Eaton Square.

Labor	\$260 00	
Bulbs, plants, etc.	26 50	
Manure	7 22	
Teaming	6 00	
Sand	1 75	
		301 47

Carried forward,

\$86,786 38

Mt. Bowdoin Green.

<i>Brought forward,</i>		\$86,786 38
Labor	\$275 00	
Teaming	27 00	
Bulbs, plants, etc.	28 70	
Manure	4 52	
Sand	1 75	
		336 97

Dorchester Town Field.

Labor	\$180 00	
		180 00

Magnolia Square.

Labor	\$120 00	
Teaming	3 00	
		123 00

Adams Square.

Labor	\$124 00	
Teaming	3 00	
		127 00

Richardson Square.

Labor	\$90 00	
		90 00

Peabody Square.

Labor	\$138 00	
Teaming	5 00	
		143 00

Tremlett Park.

Labor	\$143 00	
Sod	9 00	
Bulbs	8 70	
Teaming	3 00	
		163 70

Algonquin Square.

Labor	\$133 00	
Bulbs and plants	15 22	
		148 22

Carried forward,

\$88,098 27

Locust-street Playground.

<i>Brought forward,</i>						\$88,098 27
Labor	.	.	.	.	.	\$97 50
Loam	.	.	.	.	.	97 00
Teaming	.	.	.	.	.	37 00
						231 50

ROXBURY DISTRICT.

Washington Park.

Labor	.	.	.	.	.	\$726 00
Sod	.	.	.	.	.	69 00
Teaming	.	.	.	.	.	43 00
Red gravel	.	.	.	.	.	35 00
						873 00

Madison Park.

Labor	.	.	.	.	.	\$563 00
Sod and grass-seed	.	.	.	.	.	59 92
Teaming	.	.	.	.	.	22 00
						644 92

Orchard Park.

Labor	.	.	.	.	.	\$471 00
Teaming	.	.	.	.	.	15 00
Grass-seed	.	.	.	.	.	6 80
						492 80

Bromley Park.

Labor	.	.	.	.	.	\$265 00
Teaming	.	.	.	.	.	10 50
						275 50

Fountain Square.

* Labor	.	.	.	.	.	\$225 00
						225 00

Cedar Square.

Labor	.	.	.	.	.	\$194 00
						194 00

Longwood Park.

Labor	.	.	.	.	.	\$160 00
Teaming	.	.	.	.	.	9 00
						169 00

Carried forward,

\$91,203 99

*Square, Huntington Avenue.**Brought forward,*

Manure	\$3 65	\$91,203 99
		3 65

Lewis Square.

Labor	\$136 00	
Teaming	5 00	
		141 00

Walnut Square.

Labor	\$148 00	
Teaming	5 00	
		153 00

Linwood Park.

Labor	\$160 00	
Teaming	14 00	
		174 00

Highland Park.

Labor	\$240 00	
		240 00

Centre and Perkins Streets.

Labor	\$96 00	
Plants	2 75	
		98 75

Warren Street.

Labor	\$96 00	
Plants	2 65	
		98 65

Martin School.

Bulbs and plants	\$27 05	
Manure	8 08	
		35 13

Soldiers' Monument Lot.

Labor	\$138 00	
Teaming	5 00	
		143 00

Carried forward,

\$92,291 17

Square, Bunker Hill, Vine and Moulton Streets, Improvement of.

Fence erected	\$692 72	
Loam, labor and grading	175 00	
Digging out trench, filling and furnishing same with gravel, setting stone curb and repairing sidewalk	172 50	
Labor	52 00	
		\$1,092 22

Swimming Pool, etc., Orchard Park.

Constructing manhole	\$2,183 75	
Laying artificial stonewalks around swimming pool	200 00	
		\$2,383 75

As a convenient reference, I append the following list of the seventy parks and squares which are in charge of the Department of Public Grounds, showing their respective localities and superficial areas :

CITY PROPER.

- Common.*—Park, Tremont, Boylston, Charles and Beacon streets; contains $48\frac{2}{3}$ acres; ¹ enclosed by an iron fence.
- Public Garden.*—Charles, Boylston, Arlington and Beacon streets; contains $24\frac{1}{4}$ acres; enclosed by an iron fence.
- Fort Hill Square.*—Oliver and High streets; contains 29,480 sq. ft.
- Franklin Square.*—Washington, East Brookline, East Newton and James streets; contains 105,205 sq. ft.
- Blackstone Square.*—Washington, West Brookline, West Newton streets and Shawmut avenue; contains 105,100 sq. ft.
- Massachusetts Avenue.*—Between Albany street and Harrison avenue; contains 9,300 sq. ft.
- Massachusetts Avenue.*—Between Harrison avenue and Washington street; contains 13,050 sq. ft.
- Massachusetts Avenue.*—Between Washington and Tremont streets; contains 74,000 sq. ft.; malls enclosed by an iron fence.
- Massachusetts Avenue.*—Between Tremont street and Columbus avenue; contains 10,150 sq. ft.
- Concord Square.*—Between Tremont street and Columbus avenue; contains 5,000 sq. ft.
- Rutland Square.*—Between Tremont street and Columbus avenue; contains 7,400 sq. ft.
- Berwick Park.*—Off Columbus avenue, near N. Y., N. H. & H. R.R.; contains 3,800 sq. ft.; enclosed by granite curb.

¹ Exclusive of cemetery, containing one and two-fifths acres.

- Greenwich Park.* — Off Columbus avenue; contains 4,100 sq. ft.; enclosed by granite curb.
- Union Park.* — Between Tremont street and Shawmut avenue; contains 16,000 sq. ft.; malls enclosed by iron fence.
- Worcester Square.* — Between Washington street and Harrison avenue; contains 16,000 sq. ft.
- Lowell Square.* — Cambridge and Lynde streets; contains 5,772 sq. ft.; enclosed by iron fence.
- Park Square.* — Columbus avenue, Eliot and Pleasant streets; contains 2,867 sq. ft.
- Montgomery Square.* — Tremont, Clarendon and Montgomery streets; contains 550 sq. ft.
- Pemberton Square.* — Between Tremont row and Somerset street; contains 3,390 sq. ft.
- Copley Square.* — Between Huntington avenue, Boylston and Dartmouth streets; contains 28,399 sq. ft.; enclosed by a granite curb.
- Between Huntington avenue, Trinity place, and St. James avenue; contains 5,410 sq. ft.; enclosed by a granite curb.
- City Hall Grounds.* — School street; contains 7,700 sq. ft.
- Square.* — Harrison avenue, between Union Park and Waltham streets; contains 3,000 sq. ft.
- St. Stephen's Square.* — At the corner of St. Stephen's and Batavia streets; contains 100 sq. ft.

SOUTH BOSTON.

- Telegraph Hill.* — Thomas Park; contains 190,000 sq. ft.
- Independence Square.* — Broadway, Second, M and N streets; contains $6\frac{1}{2}$ acres; enclosed by an iron fence.
- Lincoln Square.* — Emerson, Fourth and M streets; contains 9,510 sq. ft.; enclosed by an iron fence.

EAST BOSTON.

- Maverick Square.* — Sumner and Maverick streets; contains 4,398 sq. ft.; enclosed by stone curb.
- Central Square.* — Meridian and Border streets; contains 40,310 sq. ft.; enclosed by stone curb.
- Belmont Square.* — Webster, Sumner, Lamson and Seaver streets; contains 30,000 sq. ft.; enclosed by an iron fence.
- Putnam Square.* — Putnam, White and Trenton streets; contains 11,628 sq. ft.; enclosed by an iron fence.
- Prescott Square.* — Trenton, Eagle and Prescott streets; contains 12,284 sq. ft.

ROXBURY DISTRICT.

- Madison Square.* — Sterling, Marble, Warwick and Westminster streets; contains 122,191 sq. ft.

- Orchard Park.* — Chadwick, Orchard Park and Yeoman streets; contains 104,492 sq. ft.
- Washington Park.* — Dale and Bainbridge streets; contains 396,125 sq. ft.
- Longwood Park.* — Park and Austin streets; contains 21,000 sq. ft.
- Walnut Park.* — Between Washington street and Walnut avenue; contains 5,736 sq. ft.
- Lewis Park.* — Highland street and Highland avenue; contains 5,600 sq. ft.
- Bromley Park.* — From Albert to Bickford street; contains 20,975 sq. ft.; three enclosures.
- Fountain Square.* — Walnut avenue, from Munroe to Townsend street; contains 116,000 sq. ft.
- Cedar Square.* — Cedar street, between Juniper and Thornton streets; contains 26,163 sq. ft.
- Linwood Park.* — Centre and Linwood streets; contains 3,625 sq. ft.; enclosed by stone curb.
- Public Ground.* — Centre and Perkins streets; contains 3,200 sq. ft.
- Highland Park.* — Fort Hill avenue; contains 114,065 sq. ft.
- Public Ground.* — Warren, James and Regent streets; contains 1,380 sq. ft.; enclosed by granite curb.
- Public Ground.* — Junction of Huntington avenue, Tremont and Francis streets; contains 1,662 sq. ft.
- Square.* — Albany street, near mall.

DORCHESTER DISTRICT.

- Dorchester Square.* — Meeting-House Hill; contains 56,200 sq. ft.; Soldiers' monument on this square.
- Eaton Square.* — Adams and Bowdoin streets; contains 13,280 sq. ft.
- Mt. Bowdoin Green.* — Top of Mt. Bowdoin; contains 25,170 sq. ft.
- Richardson Square.* — Between Pond and Cottage streets; contains 75,982 sq. ft.
- Public Ground.* — Magnolia street; contains 3,605 sq. ft.
- Public Ground.* — Dorchester Field;¹ contains 274,000 sq. ft.
- Public Ground.* — Adams street, near Pierce avenue; contains 2,068 sq. ft.
- Public Ground.* — Adams street, near Cedar Grove Cemetery; contains 700 sq. ft.
- Algonquin Square.* — Algonquin and Bradlee streets; contains 1,728 sq. ft.
- Tremlett Park.* — Tremlett street, between Hooper and Waldeck streets; contains 7,107 sq. ft.

¹ Property Gibson School Fund.

CHARLESTOWN DISTRICT.

City Square.—Head of Bow and Main streets; contains 8,739 sq. ft.; enclosed by stone curb and iron fence.

Public Ground.—Water street, Charles-river avenue and Warren avenue; contains 3,055 sq. ft.; enclosed by a stone curb.

Sullivan Square.—Main, Cambridge, Sever and Gardner streets; contains 56,428 sq. ft.

Winthrop Square.—Winthrop, Common and Adams streets; contains 38,450 sq. ft.; enclosed by an iron fence; Soldiers' monument on this square.

Public Ground.—Essex and Lyndeboro' streets; contains 930 sq. ft.

Hayes Square.—Bunker Hill, Vine and Moulton streets; contains 4,484 sq. ft.

WEST ROXBURY DISTRICT.

Soldiers' Monument Lot.—South and Centre streets; contains 5,870 sq. ft.

Public Ground.—Top of Mt. Bellevue; contains 27,772 sq. ft.

BRIGHTON DISTRICT.

Public Ground.—Pleasant and Franklin streets; contains 1,900 sq. ft.

Jackson Square.—Chestnut Hill avenue, Union and Winship streets; contains 4,300 sq. ft.; enclosed by stone curb.

Brighton Square.—Between Chestnut Hill avenue and Rockland street, and opposite branch of Public Library; contains 25,035 sq. ft.

Franklin Square.—Between Franklin and Fern streets; contains 1,900 sq. ft.

Rogers Park.—Foster street; contains 7 acres.

Square.—Cambridge, Murdock and Sparhawk streets; contains 7,449 sq. ft.

Greenhouses and Nursery Grounds.—Between Massachusetts avenue and East Cottage street, Dorchester; contains 102,531 sq. ft.

Storehouse Grounds.—Massachusetts avenue, adjoining location of N. Y. & N. E. R.R.; contains 96,375 sq. ft.



ANNUAL REPORT
OF THE
REGISTRY DEPARTMENT
FOR THE YEAR 1898.

Boston, July 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

SIR, — In compliance with the ordinance, I beg leave to report that, according to our books, there were recorded for the year 1898,

16,680 births { including 254 children of parents usually residing out of this city.
35 born out of town of Boston parents.

5,907 marriages solemnized in this city.

840 marriages of citizens married elsewhere in the State, including 75 marriages of citizens married out of the State.

10,903 deaths.

650 still-born children.

As compared with previous years :

	1893.	1894.	1895.	1896.	1897.	1898.
Births . .	14,602	15,401	15,613	16,484	16,973	16,680
Marriages . .	5,755	5,464	5,932	6,318	6,062	5,907
Deaths . .	11,713	11,531	11,331	11,650	11,170	10,903

Respectfully submitted,

WILLIAM H. WHITMORE,
City Registrar.

LEGISLATION.

The Legislature of 1899 passed few laws affecting this department, but the Acts will be found in the Appendix. Some progress has been made in regard to official seals, though the result is imperfect. Permission has been given by chapter 354 to use typewriting machines on public records, a scheme of doubtful utility on such records as are kept in this office. Chapter 197 transfers the jurisdiction in the case of minors or young persons of doubtful age to the Probate Courts, and proceedings therein are much more dignified, competent and satisfactory than the investigations of any city or town clerk can be. By chapter 387, the powers of Justices of the Peace to solemnize marriages has been greatly curtailed, and it seems that this step is in the right direction. Beyond doubt many irregularities have occurred in the past, and in a rapidly increasing ratio.

I beg leave to refer to my former reports for statements of legislation greatly needed, to which successive Legislatures have turned a deaf ear.

An important ruling by the Commissioner of Pensions is here given :

DEPARTMENT OF THE INTERIOR,
BUREAU OF PENSIONS, WASHINGTON, D. C.,
March 27, 1899.

W. H. WHITMORE, ESQ.,

City Registrar, Boston, Mass. :

SIR, — You are informed that if you are the custodian of the records spoken of, and certify to their correctness under seal of your office and over your signature, said certificate will be received as evidence in this Bureau. It will not be necessary for you to go before a justice of the peace and take an oath to the certificate.

The same rule would apply to town clerks if they were custodians of the records spoken of, and were authorized by law to use a seal. If copies of said records are certified to over their signatures, and under seal of their official office, the same would be received as evidence.

Very respectfully,

[Signed]

H. CLAY EVANS,
Commissioner.

FINANCIAL STATEMENT OF THE REGISTRY DEPARTMENT FOR THE YEAR ENDING JANUARY 31, 1899.

Appropriation for 1898-99 \$30,000 00

Expenditures.

Salaries	\$20,812 30	
Printing	5,091 82	
Binding	1,247 16	
Births	1,772 37	
Sundries	927 04	
Unexpended (balance)	149 31	
		<u>\$30,000 00</u>

SPECIAL RECEIPTS AND PAYMENTS.

Cash on hand February 1, 1898 (City Document No. 30) \$120 75

Receipts.

Received for Marriage Licenses, from February 1, 1898, to January 31, 1899, inclusive:

Nos. 495-6, 535, of 1898, = 6,041 certificates		
Nos. 1-539, of 1899, = 539 "		
6,580	"	@ 50c. =
		<u>3,290 00</u>
		<u>\$3,410 75</u>

Expenditures.

Paid physicians for 12,086 births at 25c., reported from February 1, 1898, to February 1, 1899, as per vouchers * paid in by me to the Auditor and receipted for by him, viz.:

1898.				
February,	702 births @ 25c. =	\$175	50	
March,	915 " " =	228	75	
April,	1,002 " " =	250	50	
May,	1,093 " " =	273	25	
June,	936 " " =	234	00	
July,	1,079 " " =	269	75	
August,	980 " " =	245	00	
September,	1,030 " " =	257	50	
October,	954 " " =	238	50	
November,	953 " " =	238	25	
December,	1,208 " " =	302	00	
1899.				
January,	1,234 " " =	308	50	
	12,086 " " =	\$3,021,50	= \$3,021	50
Cash balance, February 1, 1899			389	25
			<u>\$3,410</u>	<u>75</u>

RECORD COMMISSIONERS' ITEMS ON ACCOUNT OF ANCIENT
RECORDS FOR TWO FINANCIAL YEARS.

1897-98.

Resetting title to page 332, inclusive, thirteenth report	\$555	12
Resetting pages 33-104 and 176-324, inclusive, nineteenth report	417	15

1897-98-99.

Twenty-eighth report (issued)	\$1,731	44
Twenty-ninth report (in progress)	939	81
Thirtieth report (in progress)	996	94

* February to June, inclusive	\$1,162	00
July to October, inclusive	1,010	75
November to January, 1899, inclusive	848	75
	<u>\$3,021</u>	<u>50</u>

APPENDICES.

APPENDIX A

NOTEWORTHY PERSONS WHO DIED IN BOSTON IN 1898.

DATE OF DEATH.	AGE.
1898.	
Jan. 1 Martha Benwell	79
1 Nancy M. Richardson	76
1 William B. Bayley	78
2 Thomas Redington	76
2 Michael Sullivan	87
2 Hannah Barrett	86
2 George P. Ray	75
3 Maria Fuller	75
3 Samuel Hill	78
3 Azariah S. Newcomb	87
3 Sophronia C. Clark	86
3 Margaret Wheelock	89
4 Margaret Sullivan	75
5 Abigail A. Trufant	78
6 Charles Durham	74
7 Cordelia H. Turner	79
7 Margaret Donnelly	91
7 Olive E. Hayden	79
7 Frederick H. Hodgman	80
7 Agostino Foppiano	75
8 Helen Hartigan	86
8 Francis H. Ellis	85
9 Ann McKenney	92
10 Isaac Stern	86
10 Daniel Cram	83
10 Rachael Adams	82
10 Martha C. Rice	93
11 Caroline F. Towne	79
11 George Cutler	76
11 Bridget Gleason	93
12 Elisha B. Bridgman	74
12 Eliza A. Hobb	75
13 Ann McGrath	90
13 George L. Earl	75
13 Albert Stedman	91
14 Hannah B. Beckett	76
15 Hazen P. Huntoon	77
15 Thomas Butler	78
16 William M. Hopkins	75
16 Elizabeth W. Gregerson	83
16 Sarah E. Taylor	78
16 Nancy Greenleaf	81
16 Samuel Cushing	77
16 Concetta Romano	75
17 Charles H. Kidder	47
17 Ann Wright	80
18 Naddleman Bennett	79
19 Joseph E. O'Hara (Physician)	49
20 Susan Hersey	83
20 Johanna Dempsey	88
20 Daniel Sheehan	75
21 Hannah Patterson	94

DATE OF DEATH.

1898.

AGE.

Jan.	21	Joanna Nolan	76
	21	Mary A. Hall	75
	22	Julia A. Henry	80
	22	Mary Williams	77
	22	Dennis Cragin	77
	23	Louisa Smith	83
	23	Rufus Folsom	79
	23	Thomas W. Tuttle	81
	24	Margaret Taylor	80
	24	John B. Tileston	63
	24	Felix Sweeney	85
	24	Mary Lydon	75
	25	Elizabeth Lynch	77
	27	Mary J. Weed	85
	27	B. Frank Thayer	68
	28	Abbie M. Durgin	84
	28	Levi Prosser	74
	29	Frederick L. Richardson	76
	29	Morton Bradford	80
	30	William H. Ring	54
	30	Catharine Johnson	85
	31	Cornelia W. Richards	84
Feb.	2	Eliza A. Cummings	76
	2	William S. Hanford	75
	2	Martha A. L. Browne	87
	2	Joseph A. Smith	76
	4	Samuel B. Whitney	82
	4	Levi J. Smith (M.D.)	65
	4	William N. Brodbeck (Rev.)	50
	4	Francis V. Balch (Lawyer)	59
	4	Feroline W. Fox	87
	5	John F. Egan (Fire Chief)	48
	5	George J. Gottwald (Lieut. Fire Dept.)	31
	5	William J. Welch (Fire Dept.)	25
	5	Patrick Disken (Fire Dept.)	43
	5	John J. Mulhearn (Fire Dept.)	29
	5	James H. Victory (Fire Dept.)	43
	5	William Hagerty	83
	5	Robert Morrow	76
	5	Mary Dolan	82
	5	Caroline L. Stanwood	80
	5	Martha Ellingwood	82
	6	Rosa Von Euw	76
	6	Ann M. Henrick	78
	6	Leander S. Kenney	80
	6	Lloyd H. Brooks	84
	6	Richard A. Urann	85
	6	George Curtis	80
	6	Sullivan A. Johnston (ex-Police Sergt.)	59
	7	Ebenezer P. Oliver	78
	7	Eliza Brereton	78
	7	Eliza R. Fitz	87
	7	Joseph P. Nute	82
	8	William R. McGowan	77
	8	James E. Hayes (State Senator)	32
	8	George W. Grant	78
	8	Francis O'Connor	76
	8	Albert Roberts (Missionary)	46
	9	Martha Hutchinson	90
	10	Nathan W. Hersey	85
	10	Charles Amory	89

Killed at
Merrimac
street fire.

DATE OF DEATH.

AGE.

1898.

Feb.	10	Nancy R. Guilford	82
	10	Elizabeth Kennedy	78
	10	Joshua H. Wilder	78
	11	John A. Loring (Lawyer)	73
	11	Elizabeth Thorne	89
	11	Margaret Cullan	80
	11	Hannah O. Latham	83
	11	John E. Hickey (Rev.)	41
	12	Alfred A. Clatur	62
	12	Cecelia Healey	80
	12	Daniel McKenzie	76
	12	Samuel Mason, jr.	75
	14	Eliza S. Cook	81
	15	Margaret Scott	84
	15	John G. Herter	75
	15	Alexander Wadsworth	91
	15	Patrick Slattery	90
	15	Jane C. Angier	87
	16	Mary O. Kingsbury	82
	16	Joseph Bender	80
	16	Charles McCracken	83
	17	William H. Richan (Rev.)	64
	17	Eliza C. Gould (Teacher)	72
	18	Elkanah H. Wildes	77
	18	Amelia B. Whitaker	77
	19	Samuel Gerrish	80
	19	John E. Grace	86
	19	Mary Allen	87
	19	Franklin Oliver	77
	19	Louisa A. Platts	82
	19	William U. Moulton	73
	20	Mary S. Story	88
	20	John H. Sawyer	89
	21	James Smith	66
	21	Michael B. Coogan (Lawyer)	39
	22	Cornelius Driscoll	83
	22	Caroline S. Pickman	78
	22	Mary Nolan	96
	24	Julia A. Woodward	83
	25	Jane Donovan	95
	25	Rose Miner	89
	26	James Trumbull	79
	28	Charles H. Browne (M.D.)	85
	28	Rose A'Derrigo	83
March	1	Jane McCann	82
	1	Thomas Gardner	84
	2	Mary A. Remick	84
	2	Francis A. Kemp	81
	2	Matthew Bolles	90
	2	Jonathan P. Marsh	83
	4	Lavinia R. Warren	80
	4	Dennis O'Meara	80
	5	Christopher H. Starr	91
	5	Richard Murray	94
	5	Rebecca Miles	80
	5	Eleanor B. Starratt	86
	6	Annie Brown	72
	7	Lemuel Clark	82
	7	Michael Erb	78
	7	Elizabeth B. Cummings	78
	7	David C. Ryder	77

DATE OF DEATH.

AGE.

1898.

March	9	Charlotte B. Pollard	80
	9	Seth Bryant	97
	9	Humphrey C. Knapp	85
	9	Catherine Fuchs	80
	10	Lorenzo M. Dyer	83
	10	Daniel Murphy	90
	11	Henry A. Kent	89
	11	Ellen Hart	85
	11	Jane Crammond	79
	12	Mary McDonald	84
	13	John Fitzpatrick	81
	13	Sarah Whitney	86
	13	Mary Curry	77
	15	Timothy Griffin	81
	16	William C. Woodbury	84
	16	Benjamin F. Brackett	79
	17	Ruth Cowperthwaite	89
	17	William F. Flanders	74
	18	Caroline D. Ricker	87
	18	Ann Glynn	78
	19	Solon W. Bush (Rev.)	79
	19	Susan A. Palmer	84
	19	Julitta B. Stearns	86
	19	Mary Mitchell (Colored)	79
	20	Roland Worthington	80
	21	Clarissa H. Morse	83
	22	Lydia H. Ramsay	77
	22	Ann McLaughlin	85
	22	William A. Calkins	78
	22	Luther H. Angier	88
	22	George A. Plummer	50
	22	Richard Hurley	85
	23	Mary C. Whitmore	88
	23	Naomi Chick	76
	23	Mary A. Anthone	88
	24	Samuel P. Jenks	78
	24	John Jones	81
	24	Simon Pillsbury	82
	24	Sarah T. Bicknell	88
	25	John F. Tomfohrde	83
	25	Calista Nye	85
	26	John T. Knowlton	82
	26	John Freeman	87
	27	John P. Brawley (Asst. Clerk of Committees)	49
	27	John Wall	78
	27	Eliza A. Macfarland	90
	29	Elizabeth H. Rafter	80
	30	Francis E. Davis	81
	30	Elizabeth D. Brigham	88
	31	Eleanor M. Bryant	89
April	1	Patrick Roche	80
	2	Lucy A. Wigand	78
	3	Zilpha C. Goodwin	90
	3	Mary A. Russell	89
	4	Angeline S. Hess	85
	4	William Tavener	76
	4	Hannah Sweeney	80
	4	Patrick Nagle	86
	5	Jacob Dickens	83
	5	George M. King	81
	5	John Regan	90

REGISTRY DEPARTMENT.

11

DATE OF DEATH.		AGE.
1898.		
April	5 Moses W. Swatz	85
	6 Catherine Murphy	80
	6 Michael Collins	87
	6 Margaret McKay	84
	6 Abigail R. Osgood	81
	6 Eliza Nichols	89
	7 William Snow	75
	9 Patrick Glynn	78
	9 Matilda E. Francis	84
	10 Sarah L. Schreider	77
	10 Catherine McNamara	80
	11 Catherine Harrington	89
	11 Cornelia M. Hammond	77
	11 Caroline L. Thacher	77
	11 Jerusha S. Dodge	83
	11 Joseph Knoblock	76
	12 John O'Sullivan	87
	12 Lewis W. Tappan	83
	13 Neil Boner	96
	13 John Walker	85
	15 Mary McCarthy	80
	16 James Donlan	78
	16 Joel S. Wood	85
	17 Charles Stinson	85
	17 Catherine Gillespie	84
	17 Joseph W. Reed	77
	17 John G. Jones	76
	17 Patrick W. Havey	76
	17 David Berkman (M.D.)	55
	19 Sarah L. Coit	80
	19 Barbara M. Ruby	89
	21 Henrietta S. Reed	80
	21 Daniel Barteaux	74
	21 Joshua Brest	86
	21 Peter Fee	79
	21 Marcia A. Waldron	88
	22 James G. Pierce	77
	22 Catherine S. Vose	85
	23 Barbara W. Thain	82
	23 Catherine Callaghan	80
	23 William J. Stevens	77
	23 Levi Cooley	83
	24 Rebecca Howard	96
	24 Patrick McGuire	89
	24 Manly A. Whitman (Police Inspector)	44
	24 Albert W. Putnam	76
	25 John Adams	85
	25 Lorenzo Smith	79
	25 John Oburg	79
	26 Sarah Morrill	81
	28 Sarah W. Rumney	82
	28 Louis Gordon	84
	28 Patrick Collins	72
	29 Elijah Orcutt	84
	29 Henry B. Matthews	94
	30 William Montgomery	93
May	1 Philip H. Sears	74
	2 William Prior	79
	2 Jonas K. Tyler	73
	2 Thomas J. Ridler	82
	3 Bridget Ring	90

REGISTRY DEPARTMENT.

13

DATE OF DEATH.		AGE.
1898.		
June	3 Frank T. Robinson (Journalist)	52
	4 Michael Murphy	82
	4 John Topham	82
	4 Alanson S. Whitcomb	75
	5 Jonathan A. Lane	76
	6 Ebenezer B. Runrill	78
	6 David H. Sparhawk	83
	6 George Williams	82
	7 Magdalena Kratz	80
	8 Anna S. Ferry	85
	8 Daniel Smith	84
	9 Mary A. Davis	83
	9 George W. Cushing	92
	9 Ann Carroll	90
	11 Eliza J. H. Andrew	71
	12 John H. Burnham	78
	12 Malvina P. Beals	79
	12 Patrick J. Fay	81
	13 William H. Kilby	78
	13 Luthera W. Shorey	86
	13 James Morrissey	82
	14 Jane Mooney	84
	15 Henry S. Goodwin	79
	17 William Johnson	81
	17 Sophia C. Jones (M.D.)	76
	17 Lilli Dessauer	78
	17 John O'Donnell	86
	18 Jane S. Spooner	93
	20 Robert Mann	80
	21 Joseph O'Connell	79
	21 John R. Alley	76
	21 Mary W. Fullerton	102
	22 Hannah Wakefield	79
	23 Harriett C. Hawley	81
	24 Willard G. Flagg	78
	24 George S. Royce	78
	24 Benjamin Wheeler	82
	26 Esther Sawyer	88
	26 Edwin J. Lewis	77
	30 Irene W. Gibson	88
July	1 Charles L. Woodbury	78
	1 William Hunnewell	84
	1 Edward Warren	79
	1 Sarah McKie	84
	2 Alexis Lavigne	82
	3 Ann Coughlin	82
	3 Mary Ryan	95
	3 Eliza A. Nickerson	83
	3 James W. Norcross	76
	3 Helen L. Hale	80
	3 Mary O'Leary	86
	4 Catherine Hickey	83
	4 Matthew Nugent	87
	5 Michael Wall	86
	5 Elizabeth A. Trowbridge	77
	5 Samuel Stillings	79
	5 Andrew J. Hare (M.D.)	57
	6 Lydia A. Hall	77
	7 Margaret O'Neil	83
	7 Darius W. Foss	87
	8 Elizabeth Jackson	77

DATE OF DEATH.

1898.

AGE.

July	9	Matthew Lowry	83
	9	Sarah N. Messer	81
	10	William D. West	86
	10	Lucy Bettjemann	78
	10	Mary G. Jacobs	77
	10	Harvey Bowen	80
	10	David W. Wardrop (Col.) Customs Inspector	74
	11	Sarah J. Brown	77
	11	Elizabeth S. Harrison	84
	11	John Wingate	82
	12	Caleb Ellis	80
	12	Lovander W. Conant	77
	13	Grace F. Emery	80
	13	Jesse B. Rideout	78
	13	Henry Lundeen	82
	14	Ann G. Cahill	80
	16	Mary T. Dolliver	88
	18	George Billings	83
	19	Jean B. Lawrence (Teacher)	70
	19	Isabella D. Munro	79
	20	Laura G. Murdock	81
	20	Sarah R. Hinds	81
	21	Sarah H. Blair	80
	21	Henry W. B. Frost	79
	22	Azubah C. Sabin	82
	25	Margaret O'Kane	80
	26	Samuel T. Bird	77
	28	Albert Bowker	82
	29	Lydia M. Gardner	83
	31	Harriet W. Richardson	83
	31	Mercy Whitcomb	91
	31	Charles A. Wood	80
Aug.	1	Jeanette R. Taws	79
	2	Mary H. Munroe	88
	2	Hannah Goodwin	78
	3	John M. Marston	80
	4	Margaret Mullaney	79
	5	Samuel Jackson	81
	7	Margaret Sullivan	85
	8	Sarah A. D. Bailey	88
	8	James McLaughlin	88
	8	Mary C. F. Wilson	86
	8	Nancy A. Wyart	77
	9	Mary C. Bacor	83
	9	Ellen Cauty	80
	9	Frederick B. Bogan (Colonel of 9th Regt. Mass. Vols.)	46
	10	Lucy Sprague	87
	10	James Granlee	84
	11	Thomas Jones	80
	12	Prudence S. Nichols	79
	13	Mary Callahan	81
	13	Mary C. M. Austin	84
	13	Timothy Kelliher	89
	14	Rosalie Elson	78
	15	John Farren	81
	15	Charles T. Plimpton	77
	16	Patrick Kelley	86
	17	Sarah A. Haynes	77
	17	Hiram Wellington	93
	17	James L. Oliver	78
	20	Mary A. N. Robinson	78

15

DATE OF DEATH.		AGE.
1898.		
Aug.	20 Mary McBarron	95
	20 Martha A. Thompson	78
	20 Mary H. Downe (Teacher)	58
	20 Catherine McCann	84
	22 Margaret Trehy	81
	22 Martha P. Perkins	82
	23 Martha Brodrick	81
	23 Isaac A. Herrick	88
	23 Ann D. Tucker	85
	23 Joseph W. Domett	79
	23 Charles B. Belt (M.D.)	51
	23 John T. Harris (M.D.)	78
	23 Joanna Keeler	80
	24 Abbie G. Rice	77
	24 Ellen Whelton	78
	24 Mary Kiley	82
	24 Mary O'Hara	80
	24 Elizabeth H. Green	84
	25 Elmina N. Gavitt (M.D.)	68
	25 Catherine Cahill	80
	25 Febronia Gerhard	84
	25 Maria L. Crawley	82
	25 Eliza E. Bates	81
	26 Daniel Cronin	78
	27 Sarah C. Pierce	79
	29 Charlotte J. Robbins	77
	29 Franklin King	89
	29 Mary Sullivan	84
	30 Benjamin Whelden	82
Sept.	1 George P. K. Walker	72
	1 John L. Neilson (M.D.)	51
	2 James Waldock (M.D.)	75
	3 Sarah Mahoney	80
	4 Sarah Brown	86
	4 Bartholomew Carr	83
	4 Reuben A. Upton	80
	5 Bridget Cannon	80
	5 William Sanders	80
	5 Anna M. Krim	88
	6 Ermina E. Lord	77
	7 Margaret Condon	95
	7 Catherine Fuller	84
	10 Ann Dixon	86
	10 Jacob Steinberg	83
	10 James H. Osgood (M.D.)	65
	11 Sarah McNeil	100
	11 Bridget Rogers	83
	13 Frederick W. Lincoln (ex-Mayor)	81
	13 Hannah D. Cox	95
	14 Mary R. Clement	97
	14 Margaret Sweeney	80
	14 John J. Schwartz	85
	15 Nicholson Broughton	70
	16 Frederick F. Weden	86
	16 Alfred H. Clark (Hotel Proprietor)	58
	16 Margaret Curran	79
	16 Henry Bulling	82
	17 Alice Mongan	93
	18 Annie M. Mason	77
	19 Sarah H. Edmond	84
	19 John Magrane	87

REGISTRY DEPARTMENT.

17

DATE OF DEATH.
1898.

AGE.

Oct.	19	William H. H. Copeland	77
	20	Amanda M. Carleton	81
	20	Sarah A. McKenzie	88
	22	Cynthia R. Mason	82
	22	William Hamilton	83
	22	Frances M. Preston	78
	23	J. Heber Smith (M.D.)	55
	23	Stephen B. Richardson	80
	25	Lucy Lombardozzie	99
	25	Samuel Sargent	80
	26	Dorothy Tyrer	79
	26	Hannah Hannum	92
	26	James Lovett	80
	26	Jane Smith	80
	27	Katherine Schnopp	77
	27	Ellen Madden	80
	28	James Adams	79
	28	Sarah C. Sanderson	87
	28	Priscilla Greeley	82
	29	Philip Kenniff	94
	29	Mary Le Patourel	79
	30	William Kittredge	83
	30	George Munroe (Sergt. Police)	51
	30	Mary Slattery	82
	31	Ellen Sexton	91
	31	Caroline Perry	81
Nov.	1	Mary A. Cram	82
	1	Jesse King (M.D.)	26
	1	John Glynn	87
	2	Rebecca W. Sweeney	83
	2	Moses P. Brown	62
	3	Joseph Segar	79
	3	Richard W. Lakeman	78
	3	Margaret Reddy	89
	4	John M. Call	84
	4	John C. Chapman	75
	4	Lucinda Swan	92
	5	Susan S. Hammond	90
	5	Austin Jones	83
	5	Philip Bapp	76
	6	Helene Wolf	96
	6	Cornelia J. Shorey	88
	7	Ellen Sullivan	93
	7	John L. Roberts	83
	8	William T. Wilkinson	76
	8	George C. Hill	73
	8	Chauncey Thomas	76
	9	Mary D. Wellington	79
	10	Hannah F. Hill	83
	11	Charles A. Hewins	76
	11	Charles G. Forristall	63
	12	Andrew J. Roberts	80
	12	Mary Fales	84
	12	Jane P. Ireland	79
	14	Mary Carver	96
	15	Timothy O'Leary	85
	16	Edward Austin	95
	17	Harriet C. Kennard	80
	17	Humphrey Jameson	78
	17	Henry C. Hemmenway	68
	18	George Yabsley	84

DATE OF DEATH.		AGE.
1898.		
Nov.	19 Lucy T. Swan	78
	19 William W. Draper	77
	19 Elizabeth R. Fisher	88
	19 Caroline S. Dodge	80
	20 Joseph Borrowscale	87
	20 Orsen S. Sanders (M.D.)	78
	20 Christopher Pembroke	89
	20 Honora O'Connor	90
	21 Mary A. P. Weld	83
	22 Mary A. Corcoran	85
	22 Daniel Morris	77
	24 Lucy A. Dunbar	83
	24 Charles Deering	72
	25 John C. Thomas	77
	26 Michael Lennon	83
	26 David Bruce	84
	27 Edward St. John	83
	27 John M. Leary (Pilot)	53
	28 Lydia W. Haley	80
	28 Lydia B. Felt	81
	28 Deborah A. Patterson	82
	29 Nancy A. P. Hersey	81
	30 Eliza Wilder	87
Dec.	1 Johanna Hogan	90
	2 Mary E. Snow	87
	2 Dexter H. Follett	65
	2 Bridget O'Donnell	90
	3 Samuel Swan	81
	5 John N. Dennison	87
	7 Elbridge Fisk	87
	7 Frederick Reinhardt	71
	8 James L. Woodbridge	78
	8 Margaret Murray	88
	9 Carl Siegvist	84
	9 Elizabeth Jepson	76
	9 Eliza Richardson	79
	9 Elizabeth Green	80
	10 Laura W. Halsey	83
	10 Lydia J. Lincoln	79
	10 John L. Gardner	61
	12 George E. Clarke	77
	12 Henriette M. Wetherell	77
	12 Elizabeth P. Capron	86
	12 A. Louisa Eldridge	78
	12 John Baxter	82
	13 Ellen Sweeney	86
	14 John W. Nichols	66
	14 Samuel B. Krogman	81
	15 John F. Randolph	88
	15 Henry A. Rice	82
	16 Elizabeth Brennan	91
	16 Robert Culbert	82
	16 Patrick Corcoran	81
	17 Isaac Ingraham	86
	17 Catherine Hennessey	79
	18 Hosea H. Lincoln	77
	18 Lucy A. Hudson	85
	19 Timothy Donovan	83
	19 Lewis Lombard	79
	19 J. Warren Winslow	73
	19 Thomas Reed	91

19

RESIDENTS OF BOSTON WHO DIED ELSEWHERE.

Jan.	7	Matilda Richards (Worcester)	.	.	.	.	.	80
	22	Elizabeth V. Pratt (Worcester)	.	.	.	.	.	77
Feb.	13	James Stevenson (Hampton, Va.)	.	.	.	.	.	63
	22	George W. Simmons (Nahant)	.	.	.	.	.	60
	22	Daniel O. Barton (Chatham)	.	.	.	.	.	58
	26	Ira B. Aldrich (Worcester)	.	.	.	.	.	75
Mar.	2	Matthew J. Harkins (Medfield)	.	.	.	.	.	42
	8	Mary Leahy (Worcester)	.	.	.	.	.	76
	16	Sarah Goodwin (Medfield)	.	.	.	.	.	60
	22	Catharine Hallahan (Worcester)	.	.	.	.	.	81
	26	Mary McCarthy (Worcester)	.	.	.	.	.	90
April	1	Michael Doyle (Somerville)	.	.	.	.	.	80
May	12	Charles H. Lewis (Westboro')	.	.	.	.	.	84
	14	Joseph Stedman, M.D. (Watkins, N.Y.)	.	.	.	.	.	62
	18	Albert R. Terrill (Cohasset)	.	.	.	.	.	53
	23	John C. Regan (Providence, R.I.)	.	.	.	.	.	69
June	5	John C. Ford (Seattle)	.	.	.	.	.	57

DATE OF DEATH.				AGE.
1898.				
June	15	Charles F. Lougee (Waverly)	.	83
	19	Edwin W. Frost (Hull)	.	37
	22	F. Emile Golde (Littleton, N.H.)	.	39
July	4	Marthia E. Morse (Gloucester)	.	56
	31	Rev. John W. Galligan (Norfolk, Va.)	.	48
Aug.	1	Joseph Comer (Hull)	.	66
	5	Almon Hale (Danvers)	.	66
	6	Frank P. Collins (Tampa, Fla.)	.	25
	16	Walter E. Ford (Hull)	.	43
	23	Frank M. Ames (Bristol, Me.)	.	65
Sept.	6	Luke Hall (Scituate)	.	68
	17	Ralph F. Daley (Taunton)	.	69
	19	Elizabeth P. Parker (Plymouth, N.H.)	.	87
	28	Sarah F. Ricker (Everett)	.	69
Oct.	10	Augustus King (So. Paris, Me.)	.	90
	30	Thomas Pollard (Northbridge)	.	71
	31	Mary Thorpe (Westboro')	.	83
Nov.	26	Rev. Joseph Kreig (Providence R.I.)	.	68
Dec.	19	George B. Burrill (Cambridge)	.	72
	30	Ingenius P. Sylvester (Middleboro')	.	98
	31	Gustaf J. Ekdahl (Taunton)	.	58

UNITED STATES VOLUNTEERS IN SPANISH WAR.

July	1	John Drum, Captain (Santiago, Cuba)	58
	1	William T. Crocker (El Caney, Cuba)	19
	30	William F. Hassett (Camp Alger, Va.)	26
Aug.	3	William G. Sanders (Santiago, Cuba)	23
	6	George P. McLaughlin "	21
	6	Michael J. O'Connor, Major (Siboney, Cuba)	37
	9	Joseph D. Lane (Santiago, Cuba)	32
	9	Frank Cary "	25
	10	Halfdan R. Breiner "	27
	16	Eugene B. McLoughlin (Santiago, Cuba)	23
	17	James D. Moriarty "	18
	23	Leo J. Brady "	20
	23	John J. Mahoney (Porto Rico)	18
Sept.	24	John J. Murphy (Santiago, Cuba)	24
		Patrick J. Monahan "	22
	29	Patrick J. Grady, Major (Santiago, Cuba)	51
	1	Daniel F. Connors (Camp Wickoff, L.I.)	22
	1	Hubbard W. White "	43
	2	John J. Callahan (Fort Meyer, W. Va.)	32
	4	John J. Murphy "	19
	6	Patrick F. Moriarty (Camp Wickoff, L.I.)	22
	7	Elden P. Keene "	27
	8	Thomas L. Rourke "	21
	8	Henry S. Driscoll "	21
	10	Edward J. Donigan "	23
	10	James H. Kelly (St. Peter's Hospital, New York)	19
	11	Samuel P. Wiley (Camp Wickoff, L.I.)	28
	14	James B. Boyle "	20
Oct.	16	John F. Daley "	30
	20	John E. Riley (Colored, Porto Rico)	37
	24	Simon Brides (New York City)	18
	26	John Connors (St. Peter's Hospital, New York)	24
	19	Joseph S. Donahue (Camp Wickoff, L.I.)	23
	19	James F. Mueser "	18
	16	William J. Welch (Huntsville, Ala.)	26
Nov.	25	Joseph C. Downey (Naval Hospital, Washington, D.C.)	30

LEGISLATION OF 1899.

CHAPTER 197 OF ACTS OF 1899.

AN ACT RELATIVE TO MARRIAGES OF MINORS.

Be it enacted, etc., as follows :

Section two of chapter four hundred and one of the acts of the year eighteen hundred and ninety-four is hereby amended by inserting after the word "order" in the tenth line, the following words: — Said judge of probate may also after due hearing make such an order in the case of a person whose age is alleged to exceed that specified in the preceding section, but who is unable from any cause to produce an official record of his or her birth, to overcome the reasonable doubt of the town or city clerk or registrar, as exercised under the provisions of section two of chapter four hundred and nine of the acts of the year eighteen hundred and ninety-four, — so as to read as follows: — *Section 2.* The judge of probate in any county, after due hearing, may make an order allowing the marriage of a minor under the age specified in the preceding section: *provided*, that said minor resides in a city or town within the county wherein said judge holds court; and *provided, also*, that the father of such minor, or in case of his death the mother, has consented to such order, and that in case neither parent is alive and resident in this Commonwealth a legal guardian has been appointed, whose consent has been given to such order. Said judge of probate may also after due hearing make such an order in the case of a person whose age is alleged to exceed that specified in the preceding section, but who is unable from any cause to produce an official record of his or her birth, to overcome the reasonable doubt of the town or city clerk or registrar, as exercised under the provisions of section two of chapter four hundred and nine of the Acts of the year eighteen hundred and ninety-four. On the receipt of a certified copy of such order by the clerk or registrar of the town or city where such minor resides, he shall receive the notice required by law and issue a certificate as in other cases. [*Approved March 28, 1899.*]

CHAPTER 256 OF ACTS OF 1899.

AN ACT TO PROVIDE FOR THE ESTABLISHMENT OF CITY AND TOWN SEALS.

Be it enacted, etc., as follows :

SECTION 1. The city government of every city not already having a seal shall by ordinance establish a seal of the city and designate the custodian thereof.

SECT. 2. Within one year from the passage of this act every town not already having a seal shall, by such method as may be adopted by vote of the town at a meeting duly called for the purpose, establish a seal of the town, which seal shall be in the custody of the the town clerk; and any paper or document emanating from any officer or board of a town shall, whenever it seems necessary or desirable, be attested with the town seal.

SECT. 3. Section two of chapter three hundred and eighty-nine of the acts of the year eighteen hundred and ninety-eight is hereby repealed. [*Approved April 10, 1899.*]

CHAPTER 354 OF ACTS OF 1899.

AN ACT RELATIVE TO INKS FOR PUBLIC RECORDS AND TO MAKING SUCH RECORDS BY MEANS OF TYPEWRITING MACHINES.

Be it enacted, etc., as follows :

SECTION 1. No person having the care or custody of any public records in any department or office of the Commonwealth, or of any county, city or town therein, shall use or permit to be used upon any public record written by him or under his direction, any ink excepting such as is furnished by the commissioner of public records: *provided, however,* that printing by typewriting machines may be allowed upon such records, subject to the provisions of section four herein.

SECT. 2. Said commissioner shall from time to time advertise for proposals to furnish the several departments and offices of the Commonwealth, and of the counties, cities or towns in which public records are kept, with ink of a standard, and upon conditions to be established by the said commissioner, at such periods and in such quantities as may be required, and the commissioner may contract for the same.

SECT. 3. The inks so furnished, before being accepted by said commissioner, shall be examined by a chemist, to be designated by the commissioner, and if at any time any of said inks shall be found to be inferior to the established standard the commissioner shall have authority to cancel any contract made for furnishing such ink.

SECT. 4. No person having the care or custody of any public records mentioned in section one of this act shall use or permit to be used upon such records any ribbon, pad or other device used for printing by typewriting machines, or any ink contained in such ribbon, pad or device, except such as is approved by the commissioner of public records. Such approval shall be withdrawn by the commissioner whenever he finds that an article approved falls below the standard established by him.

SECT. 5. Any person violating the provisions of sections one or four of this act shall be punished by fine not exceeding fifty dollars.

SECT. 6. Chapter three hundred and seventy-eight of the acts of the year eighteen hundred and ninety-four and chapter five hundred and ten of the acts of the year eighteen hundred and ninety-eight are hereby repealed.

SECT. 7. This act shall take effect on the first day of September in the year eighteen hundred and ninety-nine. [Approved May 9, 1899.]

CHAPTER 387 OF ACTS OF 1899.

AN ACT RELATIVE TO THE SOLEMNIZATION OF MARRIAGES.

Be it enacted, etc., as follows :

SECTION 1. No justice of the peace shall solemnize a marriage in this Commonwealth unless he also holds one of the following offices: City or town clerk or assistant city or town clerk; city registrar or assistant city registrar; clerk of a court or assistant clerk of a court; or unless he shall have been specially designated by the Governor as hereinafter provided.

SECT. 2. The Governor may, at his discretion, designate justices of the peace who may solemnize marriages in the city or town in which they severally reside. The number so designated shall not exceed one to every five thousand inhabitants of the city or town; *provided, however,* that one such justice may be designated in each town. Such designation may be revoked by the Governor at any time for cause.

SECT. 3. Each justice of the peace designated as provided in section two shall receive a certificate of such designation, for which he shall

pay to the secretary of the Commonwealth a fee of five dollars; and he shall not solemnize a marriage until he has received such certificate and qualified thereunder.

SECT. 4. The Secretary of the Commonwealth shall annually in January send to the several city and town clerks and city registrars a list of all justices of the peace designated under this act, with the dates of termination of such designations.

SECT. 5. This act shall take effect on the first day of July in the year eighteen hundred and ninety-nine. [*Approved May 23, 1899.*]



ANNUAL REPORT
OF THE
SEALING OF WEIGHTS AND MEASURES
DEPARTMENT

FOR THE YEAR 1898-99.

BOSTON, February 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston:

SIR, — In compliance with the requirements of the Revised Ordinances, I herewith submit the annual report of the Sealing of Weights and Measures Department.

The force of the department consists of one sealer, ten deputy sealers, one messenger and one helper.

Appropriation for the fiscal year 1898-99 . . . \$24,634 00

CLASSIFICATION OF EXPENSES.

Salaries, messenger and helper's pay . . .	\$20,428 94
Horse board	1,881 00
Shoeing of horses	244 25
Medical attendance for horses	50 75
Repairs on wagons, harnesses, etc.	619 45
Tools, hardware, etc.	298 29
Stationery	80 94
<i>Carried forward</i>	<u>\$23,603 62</u>

<i>Brought forward.</i>	\$23,603 62
Printing	180 07
Telephone service	69 63
New Becker Standard balance and weights,	400 00
Advertising	53 25
Ferry-tolls	12 00
Repairing standards	113 30
Incidentals	101 46
Bromley's Atlas	100 00
Total expenditures from February 1, 1898, to February 1, 1899	\$24,633 33
Balance unexpended	67

Section 1 of chapter 123 of the Acts of 1876 provides that the sealer of weights and measures shall annually give public notice, by advertisement, or by posting notices in one or more public places, to all inhabitants or persons having a usual place of business therein, who use scales, weights, or measures, for the purpose of selling any goods, wares, merchandise, or other commodities, or for public weighing, to bring in their scales, weights and measures to be adjusted and sealed.

The same section also provides that "in those cities and towns where a salary is paid to the sealer of weights and measures no fees shall be charged for such services."

In compliance with the provisions of the foregoing section, it is customary for the sealer to notify annually, in May, all such persons as are referred to by the statutes, by publishing the required notice in the daily papers, to bring to this office their scales, weights and measures, to be tested and sealed.

Section 2 of chapter 123 of the Acts of 1876, amended by section 2 of chapter 151 of the Acts of 1877, provides that at any time after said notice the said sealer of weights and measures shall go to the houses, stores and shops of persons mentioned in the foregoing section, who have neglected to comply with the notice given thereunder, and having entered the same, with the assent of the occupants, shall adjust and seal their scales, weights and measures, and shall be entitled to receive for said service the compensation set forth in chapter 51, section 14, of the General Statutes.

The customary notice having been published, after a reasonable time the deputy sealers were instructed to visit the places where scales, weights and measures were in use; and

having informed the owners thereof that it was optional with them whether their scales, etc., should be tested at this office or at their places of business, and in the former case no charge would be made for such services, proceeded thereafter, with their consent to test and seal the same.

The schedule of fees for work done outside the office is as follows:

FOR TESTING.

Platform scales (5,000 lbs. capacity and upwards)	. \$1 00
“ “ (less than 5,000 lbs. capacity)	. 50
Dormant “ (“ “ “ “ “)	. 50
Beam “ (capacity over 1,000 lbs.)	. 50
Counter platform scale (large size)	. 50
“ “ “ (small size)	. 25
Butchers' scale, spring balance, counter-balance, or trip scale, each	. 03
Weights, each	. 03
Measures, wet or dry, each	. 03
Yardsticks, each	. 03

ADJUSTING.

For adjusting or repairing any scale, a fair and reasonable compensation.

For weights when either light or heavy, not to exceed ten cents each.

For yardsticks, not to exceed five cents each.

For measures, wet or dry, when either large or small, not to exceed ten cents each.

For adjusting or repairing any special weight or measure, not mentioned above, a fair and reasonable compensation.

OPERATIONS OF THE DEPARTMENT FROM FEBRUARY 1, 1898, TO FEBRUARY 1, 1899.

Number of scales 5,000 lbs. to 150 tons tested	. 730
“ dormants less than 5,000 lbs. “	. 560
“ beef-track scales tested	. 171
“ portable platforms tested	. 3,957
“ counter “ “	. 971
“ spring balances tested	. 3,770
“ trip scales “	. 3,700
“ counter-balances “	. 1,268
“ public weighers' scales tested	. 37
“ beams or balances “	. 262
Total number of scales tested	. <u>15,426</u>

Number of scales tested and found correct . . .	10,373
Number of scales tested and adjusted before sealing	2,772
Number of scales tested and tagged for repairs . . .	1,409
Number of scales that were repaired as ordered . . .	787
Number of scales that were condemned	85
Total number of scales tested	<u>15,426</u>
Number of weights tested and found correct . . .	39,913
Number of weights tested and found light and adjusted	8,598
Number of weights tested and found heavy and adjusted	1,247
Number of weights tested and condemned	46
Total number of weights tested	<u>49,804</u>
Number of dry measures tested and found correct, . . .	9,295
“ “ “ “ “ adjusted	48
“ “ “ “ “ condemned	115
Total number of dry measures tested	<u>9,458</u>
Number of wet measures, including glass milk jars and cans, tested and found correct	126,596
Number of wet measures, including milk cans, tested and adjusted	1,045
Number of wet measures, including milk cans and jars, tested and condemned	10,870
Total number of wet measures, including milk cans, tested	<u>138,511</u>
Number of yardsticks tested and found correct . . .	814
“ “ “ “ “ adjusted	551
“ “ “ “ “ condemned	66
Total number of yardsticks tested	<u>1,431</u>
Number of charcoal baskets tested and found correct	46
Number of charcoal baskets tested and condemned, ...	12
Total number of charcoal baskets tested	<u>58</u>

Number of coal baskets tested and found correct .	470
“ “ “ “ condemned .	44

Total number of coal baskets tested . .	514
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Number of surveyors' steel tapes tested . .	15
“ salt tubs tested	13
“ brewers' grain tubs tested	10

The system of testing and sealing at their places of business gives general satisfaction. Many, however, object to the charges, and send their scales, etc., to this office, and in this way the following work has been done, which is included in the “operation of the department,” and for which no fees are allowed.

The amount of work done in the office from February 1, 1898, to February 1, 1899, was as follows:

Scales of all descriptions tested	3,038
Weights tested	9,770
Dry measures tested	3,059
Wet measures, including milk cans, tested . .	130,946
Yardsticks tested	372
Charcoal baskets tested	58
Coal baskets “	514
Steel tapes “	15
Brewers' grain tubs tested	13
Salt tubs tested	10

Total pieces tested in office	147,795
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Number of portable platforms tested	292
“ counter “ “	191
“ spring balances tested	1,129
“ trip scales “	1,012
“ counter-balances tested	305
“ public weighers' scales tested	26
“ beams or balances “	83

Total number of scales tested	3,038
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Number of scales tested and found correct . .	1,403
Number of scales tested and adjusted before sealing,	461
Number of scales tested and tagged for repairs .	603
Number of scales that were repaired as ordered .	461
Number of scales that were condemned	110

Total number of scales tested	3,038
---	-------

Number of weights tested and found correct	5,178
Number of weights tested and found light and adjusted	3,697
Number of weights tested and found heavy and adjusted	863
Number of weights tested and condemned	32

Total number of weights tested	<u>9,770</u>
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Number of dry measures tested and found correct, ...	2,914
“ “ “ “ “ adjusted	30
“ “ “ “ “ condemned	115

Total number of dry measures tested	<u>3,059</u>
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Number of wet measures, including milk cans, tested and found correct	119,031
Number of wet measures, including milk cans, tested and adjusted	1,045
Number of wet measures, including milk cans, tested and condemned	10,870

Total number of wet measures, including milk cans tested	<u>130,946</u>
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RECAPITULATION.

Total number of scales tested from February 1, 1898, to February 1, 1899	15,426
Total number of weights tested from February 1, 1898, to February 1, 1899	49,804
Total number of dry measures tested from February 1, 1898, to February 1, 1899	9,295
Total number of wet measures, including milk cans, tested from February 1, 1898, to February 1, 1899	138,511
Total number of yardsticks tested from February 1, 1898, to February 1, 1899	1,431
Total number of charcoal baskets tested from Feb- ruary 1, 1898, to February 1, 1899	58
Total number of coal baskets tested from February 1, 1898, to February 1, 1899	514
Total number of steel tapes tested from February 1, 1898, to February 1, 1899	15
Total number of salt tubs tested from February 1, 1898, to February 1, 1899	13
Total number of brewers' grain tubs tested from February 1, 1898, to February 1, 1899	<u>10</u>

EARNINGS OF DEPARTMENT.

Total amount of earnings from February 1,	
1898, to February 1, 1899	\$5,957 34
The amount uncollected due department	292 24
Balance paid to City Collector	\$5,665 10
Unpaid bills of previous financial year paid to City Collector	246 57
Total amount collected, which has been paid to the City Collector to be credited to the Depart- ment of Weights and Measures from February 1, 1898, to February 1, 1899	<u>\$5,911 67</u>

If fees had been collected on work done in the office during the year as on work done outside, the revenue would have been increased \$5,310.21.

INVENTORY OF PROPERTY IN THE SEALER'S OFFICE
BELONGING TO THE CITY OF BOSTON, FEBRUARY
1, 1899.

Standard Avoirdupois Balances.

1 balance and cabinet furnished by the Commonwealth to Suffolk County, in the custody of the Boston Sealer; capacity, 100 lbs.

1 balance and cabinet furnished city of Boston by the Commonwealth; capacity, 100 lbs.

1 balance, sensitive to $\frac{1}{4}$ grain; capacity, 16 lbs.

1 dormant scale, capacity, 2,700 lbs.

1 platform balance, capacity, 300 lbs., sensitive to $\frac{1}{4}$ oz.

1 balance for testing 50-lb. weights, sensitive to 1 grain.

Standard Troy Balances.

1 bank gold balance, sensitive to $\frac{1}{4}$ grain; capacity, \$10,000.

1 jewellers' balance, sensitive to $\frac{1}{16}$ grain; capacity, 12 lbs.

1 apothecaries' balance, sensitive to $\frac{1}{10}$ grain; capacity, 8 lbs.

1 apothecaries' prescription balance, sensitive to $\frac{1}{1000}$ grain, capacity, 3 oz.

Standard Metric Balances.

1 Becker balance, capacity 2 kilograms in each pan, with beam divided into 120 parts, each part corresponds with $\frac{1}{1000}$ of a grain and sensitive to $\frac{1}{10}$ of milligram with scale loaded to full capacity.

1 short-beam analytical Becker balance, with aluminum beam, bows and plans; agate bearings, with adjustable shelf for supporting beaker with water, when taking specific gravities sensitive to $\frac{1}{20}$ of a milligram; capacity, 400 grammes.

Standard Avoirdupois Weights.

1 set of steel weights, 5, 10, 20, 25 and 50 lbs.; 5 weights.

1 set brass weights, from 1 drachm to 4 lbs.; 12 weights.
(The above-named weights belong to Suffolk County.)

1 set of steel weights, 5, 10, 20, 25 and 50 lbs.; 5 weights.

1 set brass weights, from 1 drachm to 4 lbs.; 12 weights.

Standard Troy Weights.

1 box of gold weights, from \$1,000 to \$5,000; 17 weights.

1 box of gold weights, from 10 dwts. to 3,000 dwts.; 11 weights.

1 box of gold weights, from 10 dwts. to 1,000 dwts.; 9 weights.

1 box of gold weights, from 10 dwts. to 500 dwts.; 9 weights.

1 box of gold weights, from $\frac{1}{2}$ dwt. to 500 dwts.; 19 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 1,000 grains; 23 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 240 grains; 19 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 10 grains; 10 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 10 grains; 9 weights.

1 set of cup weights, from $\frac{1}{4}$ oz. to 128 oz.; 11 weights.

1 set of cup weights, from $\frac{1}{4}$ oz. to 19 oz.; 8 weights.

1 set of diamond weights, from $\frac{1}{64}$ of carat to 300 carats; 17 weights.

Metric Weights.

1 box of weights, from 10 milligrams to 1 kilogram; 21 weights.

1 box of weights, from 1 milligram to 100 grammes; 25 weights.

1 box of weights, from 50 kilograms to 200 kilograms; 6 weights.

1 box containing 1 kilogram.

Apothecary Weights.

1 box of weights, from $\frac{1}{2}$ scruple to 1 oz.; 7 weights.

1 set of weights, from $\frac{1}{2}$ scruple to 2 drachms; 6 weights.

Standard Measures of Length.

1 metric meter.

1 U. S. standard yard measure.

Standard Dry Measures.

1 set of iron measures, from 1 qt. to $\frac{1}{2}$ bushel. (5 measures.) Suffolk County standards.

1 set of iron measures, from 1 qt. to $\frac{1}{2}$ bushel. (5 measures.)

1 set of iron measures, from 1 qt. to $\frac{1}{2}$ bushel. (5 measures.) City of Boston standards.

Standard Liquid Measures.

1 set of iron measures, from 1 gill to 1 gall. (6 measures.) Suffolk County standards.

1 set of iron measures, from 1 gill to 1 gall. (6 measures.)

1 set of iron measures, from 1 gill to 1 gall. (6 measures.) City of Boston standards.

*Duplicates of the Standard Weights and Measures.**Working Sets.*

7 sealers' try scales.

2 even balances.

8 boxes of brass weights, from $\frac{1}{16}$ oz. to 4 lbs. (79 weights.)

1 set of steel weights, from 5 to 50 lbs. (5 weights.)

6 sets of brass hook weights, from 1 lb. to 16 lbs. (36 weights.)

- 140 U. S. standard 50-lb. weights.
- 1 box brass troy weights. (6 weights.)
- 1 set of apothecaries' weights, from 1 grain to 6 drachms. (21 weights.)
- 8 sets copper liquid measures, from 1 gill to 1 gall. (48 measures.)
- 2 three-gallon copper measures.
- 1 two-gallon copper measure.
- 28 copper dry measures, from 1 gill to 1 qt.
- 1 set of copper dry measures, from 1 qt. to $\frac{1}{2}$ bushel. (5 measures.)
- 1 copper measure with nozzle, $\frac{1}{2}$ bushel.
- 4 brass yardstick measures.
- 4 charcoal-basket measures.
- 1 upright drill.
- 7 bench drills.
- 1 2-yardstick.
- 7 diamonds for marking milk jars.

Horses, Wagons, Tools, etc.

- 6 horses.
- 7 wagons.
- 2 pungs.
- 7 sets of harnesses.
- Complete outfit for horses, wagons, etc., miscellaneous tools.

Office Furniture.

- Safe, wardrobe-closet, umbrella-stand, chairs, 2 desks, work-benches, 2 clocks, counters, racks, stationery, water-cooler, 1 letter-press and stand.

Respectfully submitted,

DANIEL P. SULLIVAN,
Sealer of Weights and Measures.



ANNUAL REPORT
OF THE
SINKING FUNDS DEPARTMENT
FOR THE YEAR 1898-99.

BOARD OF COMMISSIONERS OF SINKING FUNDS,
CITY HALL, October 31, 1899.

HON. JOSIAH QUINCY,
Mayor of the City of Boston :

SIR,—The Board of Commissioners of Sinking Funds have the honor of presenting the following report, showing the transactions during the year ending January 31, 1899 :

Amount of cash in treasury January 31, 1898,	\$4,190,019 97	
Receipts during the year	7,498,039 43	
		\$11,688,059 40
Payments during the year	8,028,590 75	
Amount of cash January 31, 1899	\$3,659,468 65	
Total amount of investments January 31, 1898,	\$23,388,350 00	
Investments purchased during the year	4,570,980 00	
<i>Carried forward</i>	\$27,959,330 00	\$3,659,468 65

<i>Brought forward</i>	. \$27,959,330 00	\$3,659,468 65
Investments matured during the year	. . . 4,107,000 00	
		23,852,330 00
Amount of funds January 31, 1899	. . .	<u>\$27,511,798 65</u>

With this report will be found the report of the Treasurer, the annual statement of the Board, showing debt and funds, and a statement covering the work for eighteen years, with the report of the examiner.

Respectfully submitted,

CHAS. H. COLE,

Chairman.

CITY OF BOSTON, February 24, 1899.

To the Board of Commissioners of Sinking Funds of City of Boston:

GENTLEMEN,—The undersigned herewith presents his annual report as Treasurer of the Board of Commissioners of Sinking Funds:

Balance of Cash, January 31, 1898.....			\$4,190,019 97
Received in 1898-99:			
Interest on Bank Deposits ...		\$74,646 13	
Interest on Investments.....		1,004,179 54	
Interest on Sterling Debt redeemed in London.....		79,335 88	
Revenue from Betterments, etc.		55,151 61	
Revenue from Laying-out and Construction of Highways.....		42,779 77	
Income from Sewer Division to meet Sewerage Loan-Debt Requirement.....		41,094 50	
Appropriation for Debt, 1898-99.....		1,893,517 00	
Premium on Loans negotiated.....		6,940 00	
Income from Cochituate Water Works for Debt Requirement		123,395 00	
Investments matured.....		4,107,000 00	
			7,498,039 43
			\$11,688,059 40
Disbursed in 1898-99:			
City Treasurer, Redemption of Debt.....	\$3,456,570 04		
Cost of Redemption of Debt.....	1,040 71		
Investments purchased.....	4,570,980 00		
			8,028,590 75
Cash Balance, January 31, 1899.....			<u>\$3,659,468 65</u>

RESOURCES OF THE SINKING FUNDS, JANUARY 31, 1899.

SINKING FUND.	Cash.	Investments.	Total Resources.
Consolidated Street Improvement.....	\$652,294 15	\$1,510,300 00	\$2,162,594 15
New Public Library, Special.....	399,654 08	331,000 00	730,654 08
Twenty-Year.....	645,402 24	5,344,330 00	5,989,732 24
Ten-Year.....	951,435 34	2,409,000 00	3,360,435 34
Public Park.....	65,514 42	968,300 00	1,033,814 42
Public Park, Special.....	182,712 48	1,667,100 00	1,849,812 48
New Cambridge Bridge.....	5,185 00	68,000 00	73,185 00
Stony Brook Improvement.....	17,498 00	134,000 00	151,498 00
Improved Sewerage, Special.....	12,335 01	215,500 00	227,835 01
New Ferry Landing.....	8,261 86	4,000 00	12,261 86
Laying-Out and Construction of Highways..	44,284 61	727,500 00	771,784 61
Rapid Transit.....	2,913 03	281,000 00	283,913 03
Rapid Transit, Charlestown Bridge, No. 1..	12,714 25	26,300 00	39,014 25
Rapid Transit, Charlestown Bridge, No. 2..	3,760 67	11,000 00	14,760 67
Blue Hill and Other Avenues.....	6,329 74	258,500 00	264,829 74
School-houses, No. 1.....	7,820 96	13,000 00	20,820 96
School-houses, No. 2.....	24,619 98	76,000 00	100,619 98
South Union Station.....	377,917 08	.....	377,917 08
Suffolk County Court-House.....	40,788 98	446,000 00	486,788 98
Sewerage Loan.....	41,406 89	31,000 00	72,406 89
Cochituate Water.....	156,619 88	9,330,500 00	9,487,119 88
	\$3,659,468 65	\$23,852,330 00	\$27,511,798 65

DEBT LIABILITIES OF THE SINKING FUNDS, JANUARY 31, 1899.

CLASSIFICATION OF DEBT.	Liabilities, Jan. 31, 1898.	Debt Issued in 1898-99.	Debt Paid in 1898-99.	Liabilities, Jan. 31, 1899.
Consolidated Street Improve- ment.....	\$1,585,761 78	.....	\$117,570 04	\$1,468,191 74
New Public Library, special ..	2,000,000 00	\$100,000 00	.....	2,100,000 00
Twenty-Year.....	18,352,475 00	601,980 00	1,100,000 00	17,854,455 00
Ten-Year.....	6,150,300 00	347,000 00	1,185,000 00	5,312,300 00
Public Park.....	2,918,300 00	.....	.....	2,918,300 00
Public Park, Special.....	9,200,000 00	500,000 00	.....	9,700,000 00
New Cambridge Bridge.....	250,000 00	.....	.....	250,000 00
Stony Brook Improvement ..	1,000,000 00	.....	.....	1,000,000 00
Improved Sewerage, Special ..	500,000 00	.....	.....	500,000 00
New Ferry Landing.....	142,800 00	26,000 00	.....	168,800 00
Laying-Out and Construction of Highways.....	4,250,000 00	811,650 00	.....	5,061,650 00
Rapid Transit.....	4,500,000 00	200,000 00	.....	4,700,000 00
Rapid Transit, Charlestown Bridge, No. 1.....	750,000 00	.....	.....	750,000 00
Rapid Transit, Charlestown Bridge, No. 2.....	200,000 00	.....	.....	200,000 00
Blue Hill and Other Avenues..	2,500,000 00	750,000 00	.....	3,250,000 00
School-houses, No. 1.....	500,000 00	.....	.....	500,000 00
School-houses, No. 2.....	1,150,000 00	650,000 00	.....	1,800,000 00
South Union Station.....	1,600,000 00	100,000 00	.....	1,700,000 00
Suffolk County Court House...	2,921,000 00	.....	.....	2,921,000 00
Suffolk County, General.....	64,000 00	.....	64,000 00	.....
Sewerage Loan.....	500,000 00	1,500,000 00	.....	2,000,000 00
Cochituate Water.....	17,911,273 98	200,000 00	990,000 00	17,121,273 98
Thirty-Year.....	.....	25,000 00	.....	25,000 00
Market or Other Public Pur- poses.....	.....	616,000 00	.....	616,000 00
Cambridge Bridge.....	.....	50,000 00	.....	50,000 00
	\$78,945,910 76	\$6,477,630 00	\$3,456,570 04	\$81,966,970 72

CASH DEPOSITED IN BANKS AND TRUST COMPANIES JANUARY 31, 1899.

NATIONAL BANKS.		
Atlantic.....	\$47,299 35	
Atlas.....	64,046 79	
Blackstone.....	49,500 72	
Boylston.....	49,822 83	
Broadway.....	33,010 01	
Bunker Hill.....	47,380 96	
Central.....	147,005 64	
Colonial.....	32,285 77	
Commercial.....	14,606 99	
Eliot.....	62,988 22	
Faneuil Hall.....	190,432 80	
First.....	86,128 82	
First Ward.....	32,809 45	
Fourth.....	49,164 11	
Freemans.....	32,644 09	
Globe.....	190,101 76	
Mechanics.....	47,272 81	
Merchants.....	382,320 44	
Metropolitan.....	17,361 32	
Monument.....	17,369 20	
Mount Vernon.....	18,136 27	
National Bank of the Commonwealth.....	64,589 27	
" " Republic.....	59,317 96	
" Exchange Bank.....	65,158 55	
" Hide and Leather Bank.....	79,716 24	
" Market of Brighton.....	26,891 25	
" Rockland.....	28,592 63	
" Security.....	28,395 81	
" Shawmut.....	205,207 13	
" Union.....	64,785 72	
" Webster Bank.....	76,376 06	
New England.....	66,245 12	
Old Boston.....	45,887 54	
Peoples.....	26,762 53	
Second.....	65,702 88	
Shoe and Leather.....	64,477 75	
State.....	332,099 05	
Third.....	66,201 08	
Washington.....	48,915 32	
Winthrop.....	33,025 88	
TRUST COMPANIES.		
American Loan and Trust Company.....	50,367 78	
Bay State Trust Company.....	15,078 09	
Beacon Trust Company.....	19,271 14	
Boston Safe Deposit and Trust Company.....	67,637 62	
Columbia Trust Company.....	36,102 84	
International Trust Company.....	49,871 14	
Massachusetts Loan and Trust Company.....	36,143 17	
Mercantile Trust Company.....	12,217 43	
New England Trust Company.....	96,660 93	
Old Colony Trust Company.....	126,680 56	
Puritan Trust Company.....	17,826 98	
State Street Trust Company.....	15,078 09	
United States Trust Company.....	17,815 37	
Total cash on deposit.....		\$3,620,787 26
Cash on hand in office.....		38,681 39
Total cash resources, January 31, 1899.....		\$3,659,468 65

INVESTMENTS JANUARY 31, 1899.

City of Boston 4% Bonds.....	\$12,396,350 00	
" " " 3 $\frac{1}{2}$ % ".....	4,649,980 00	
" " " 3 $\frac{1}{2}$ % ".....	29,000 00	
" " " 3% ".....	309,000 00	\$17,384 330 00
Cochituate Water 6% Bonds.....	\$2,312,000 00	
" " " 4% ".....	2,431,000 00	
" " " 3 $\frac{1}{2}$ % ".....	400,000 00	
" " " 3% ".....	200,000 00	5,343,000 00
County of Suffolk 4% ".....	\$496,000 00	
" " " 3% ".....	629,000 00	1,125,000 00
Total Investments January 31, 1899.....		<u>\$23,852,330 00</u>
Amount of Investments on hand January 31, 1898.....		\$23,388,350 00
Purchased in 1898-99:		
City of Boston 3 $\frac{1}{2}$ % Bonds.....	\$1,570,980 00	
" " " Temporary 2 $\frac{3}{4}$ % Loan.....	3,000,000 00	4,570,980 00
		<u>\$27,959,330 00</u>
Matured in 1898-99:		
City of Boston Temporary 2 $\frac{3}{4}$ % Loan.....	\$3,000,000 00	
" " " 4% Bonds.....	100,000 00	
County of Suffolk 3% Bonds.....	17,000 00	
Cochituate Water 6% ".....	990,000 00	4,107,000 00
Amount of Investments January 31, 1899.....		<u>\$23,852,330 00</u>
Total cash on hand and on deposit.....		\$3,659,468 65
" Investments.....		23,852,330 00
Total resources of Sinking Funds January 31, 1899.....		<u>\$27,511,798 65</u>

STATEMENT

OF THE CASH RECEIPTS AND DISBURSEMENTS OF ALFRED T. TURNER, TREASURER
OF THE BOARD OF COMMISSIONERS OF SINKING FUNDS OF CITY OF BOSTON, FROM
JULY 16, 1881, TO JANUARY 31, 1899, INCLUSIVE.

Amount of Cash received from C. H. Dennie, Treasurer, July 16, 1881.....		\$1,365,928 20
Cash receipts:		
July 16, 1881 to April 30, 1882.....	\$3,696,475 98	
May 1, 1882 " " " 1883.....	4,955,195 34	
" 1, 1883 " " " 1884.....	4,997,400 18	
" 1, 1884 " " " 1885.....	4,291,180 57	
" 1, 1885 " " " 1886.....	3,418,975 23	
" 1, 1886 " " " 1887.....	4,663,236 32	
" 1, 1887 " " " 1888.....	4,229,152 62	
" 1, 1888 " " " 1889.....	6,388,433 83	
" 1, 1889 " " " 1890.....	4,859,804 01	
" 1, 1890 " " " 1891.....	6,040,412 79	
" 1, 1891 " Jan. 31, 1892.....	8,854,593 85	
Feb. 1, 1892 " " " 1893.....	10,163,938 71	
" 1, 1893 " " " 1894.....	8,825,587 39	
" 1, 1894 " " " 1895.....	3,859,602 59	
" 1, 1895 " " " 1896.....	3,503,808 09	
" 1, 1896 " " " 1897.....	3,549,707 11	
" 1, 1897 " " " 1898.....	4,874,163 99	
" 1, 1898 " " " 1899.....	7,498,039 43	
		100,669,708 03
Cash disbursements:		\$102,035,636 23
July 16, 1881 to April 30, 1882.....	\$2,619,174 81	
May 1, 1882 " " " 1883.....	5,988,629 28	
" 1, 1883 " " " 1884.....	4,774,324 39	
" 1, 1884 " " " 1885.....	2,864,567 54	
" 1, 1885 " " " 1886.....	4,527,025 97	
" 1, 1886 " " " 1887.....	5,398,858 89	
" 1, 1887 " " " 1888.....	2,734,208 80	
" 1, 1888 " " " 1889.....	4,599,541 89	
" 1, 1889 " " " 1890.....	5,727,351 99	
" 1, 1890 " " " 1891.....	5,805,116 34	
" 1, 1891 " Jan. 31, 1892.....	6,157,852 45	
Feb. 1, 1892 " " " 1893.....	10,704,092 71	
" 1, 1893 " " " 1894.....	10,937,072 56	
" 1, 1894 " " " 1895.....	6,275,546 27	
" 1, 1895 " " " 1896.....	2,981,044 88	
" 1, 1896 " " " 1897.....	5,053,486 91	
" 1, 1897 " " " 1898.....	3,199,681 15	
" 1, 1898 " " " 1899.....	8,028,590 75	
		98,376,167 58
Cash balance January 31, 1899.....		\$3,659,468 65

WATER WORKS FUND.

Established by order of City Council, September 16, 1898,
it forms no part of the resources of the Sinking Funds for
City of Boston debt, but contains investments placed in said
fund by authority of the above order, and the income of the
fund is to be used to meet the sums assessed on City of
Boston by the Commonwealth of Massachusetts for Metro-
politan Water Purposes.

Amount of investments now in fund . . . \$4,699,000

Respectfully submitted,

ALFRED T. TURNER,

Treasurer.

BOARD OF COMMISSIONERS OF SINKING FUNDS.

John H. Sullivan*	.	.	.	term expires May 1, 1899.
Charles E. Morrison	.	.	.	term expires May 1, 1899.
Charles H. Cole, <i>Chairman</i>	.	.	.	term expires May 1, 1900.
Frank G. Webster	.	.	.	term expires May 1, 1900.
Nathaniel J. Rust	.	.	.	term expires May 1, 1901.
Ubert K. Pettingill	.	.	.	term expires May 1, 1901.

* Deceased.

CITY OF BOSTON,
BOARD OF COMMISSIONERS OF SINKING FUNDS,
CITY HALL, May 17, 1899.

The Committee on Accounts of this Board, appointed to examine the investments of the Sinking Funds, having completed its examination, report that they find the amount of bonds stated by the Treasurer, viz., \$23,852,330, is correct; and also the amount of bonds in the Water Works Fund, of which the Board is custodian, amounting to \$4,699,000, is correct.

NATHANIEL J. RUST,
UBERT K. PETTINGILL,
EDWARD H. DUNN,

Committee on Accounts.

28 STATE STREET, BOSTON, October 17, 1899.

To the Board of Commissioners of Sinking Funds of the City of Boston:

GENTLEMEN,—I have made by your request the annual examination of the books and accounting matters of the Treasurer of your Board for the year which ended with the 31st day of January, 1899.

I inspected carefully the entries of all transactions for the year, and reviewed in every detail all the clerical work performed—such as additions, postings and verification of balances. Finally, I traced all results into the trial balance sheet of the 31st of January, 1899, which is a true abstract from the ledger. I demonstrated the correctness of the amount of cash—belonging to the different funds—deposited in the various banks and trust companies of the city, the total of which at the close of the fiscal year was \$3,659,468.65.

I have examined also Mr. Turner's annual report to you, and I certify that the statements therein as to the receipts and disbursements of cash, the amounts of investments, and the resources and debt liabilities of the Sinking Funds are true in all particulars.

It gives me pleasure to be able to say that the books of the Board are being kept in a manner worthy of all commendation.

Yours very respectfully,

ANDREW STEWART,

Examiner of Accounts.



ANNUAL REPORT
OF THE
SOLDIERS' RELIEF DEPARTMENT
FOR THE YEAR ENDING JANUARY 31, 1899.

CHARITY BUILDING, CHARDON STREET,
BOSTON, February 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

SIR, — In accordance with the requirements of the Ordinances I hereby present a report of the work of this department for the year.

Under the provisions of the different acts of the Massachusetts Legislature, aid has been paid to soldiers and sailors who served in the war of the Rebellion and in the war with Spain and to the families of the same as follows :

Chap. 301, Acts of 1894, to 2,562	
persons	\$129,243 00
Chap. 279, Acts of 1894, to 301	
persons	30,794 92
Chap. 447, Acts of 1890, to 525	
persons	39,721 23
Chap. 561, Acts of 1898, to 216	
persons	5,547 00
	\$205,306 15
<i>Carried forward</i>	
	\$205,306 15

Brought forward \$205,306 15

Under the provisions of Chap. 279, Acts of 1896, and Chap. 164, Acts of 1897, payments for the burials of veterans, and wives and widows of veterans have been made as follows :

Veterans	\$4,340 00	
Wives and widows	1,105 00	
Office expenses	325 00	
		5,770 00

SALARIES.

Commissioner	\$3,500 00	
Clerks	8,674 96	
		12,174 96

OFFICE EXPENSES.

Printing	\$296 83	
Stationery	94 57	
Travelling expenses	138 72	
Telephone service	92 83	
		622 95
		<u>\$223,874 06</u>

Appropriation	\$225,000 00	
Transfer to meet the payments under the provisions of Chap. 561, Acts of 1898, Spanish war expenses	2,000 00	
		\$227,000 00
Expenditures		223,874 06
Balance		<u>\$3,125 94</u>

RECEIPTS.

There was received from the State of Massachusetts, as follows :

Chap. 301, Acts of 1894	\$131,187 50	
“ 279, “ “ “	16,642 62	
		\$147,830 12
“ 279, Acts of 1896		5,880 00
		<u>\$153,710 12</u>

Respectfully submitted,

REUBEN PETERSON,
Commissioner.



ANNUAL REPORT
OF THE
STATISTICS DEPARTMENT
FOR THE
YEAR ENDING JANUARY 31, 1899.

BOSTON, February 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

SIR, — In compliance with the provisions of the Revised Ordinances, we have the honor to submit the following report of the work of this department for the year ending January 31, 1899 :

In our last annual report, we outlined a variety of work which this department might profitably undertake, but we were unable to report the completion of any definite undertaking. The year just finished has been devoted to the accomplishment of certain specific pieces of work, in accordance with the suggestions outlined in our last report. While we have accomplished only a part of the things which it would be desirable for us to undertake, we have completed and published two important sets of tables.

We suggested the advisability, in our last report, of separating the accounts of the city into four parts which should deal respectively with (1) ordinary receipts and expenditures, (2) extraordinary receipts and expenditures, (3) trust funds, and (4) book-keeping items, thus enabling

any one, who wished to study the finances of the city, to eliminate at a glance the items which were immaterial to his purpose, and to find in print a statement of the important items so arranged that they could be separately considered and compared from year to year.

SPECIAL PUBLICATION, NO. 1.

In our Special Publication, No. 1, we presented to the public a classified exhibit of the ordinary expenses of the city. This showed (1) the ordinary expenses in their relation to the total expenses of the city; (2) the several items of ordinary expenses in their relation to the total ordinary expenditure; and (3) the expenses of each department in a series of comparative tables covering a five-year period. The last showed not only the actual expenditures of the departments, but the estimated expenditures on which the appropriations were based, and the difference between appropriation and actual expenditure which resulted in leaving a balance on hand at the end of the year or in making an increase of the appropriation necessary. It is interesting to note in this connection the net amount of additional appropriations which was required in each year. Thus, the actual expenditures were less than the appropriations and other available resources of the departments in 1892-93 to the extent of \$364,051.93, in 1893-94 to the extent of \$174,069.42; while the actual expenditures exceeded the appropriations and other resources to the amount of \$56,299.57, in 1894-95; in 1895-96 to the amount of \$45,103.39, and in 1896-97 to the amount of \$178,326.02. It was possible, during the last three years mentioned, to exceed the original appropriations to such an extent by reason of the fact that the actual income largely exceeded the estimates of income made at the beginning of the year.

The publication also showed that the following amounts had been expended out of ordinary income for extraordinary purposes, that is to say for permanent work: in 1892-93, \$49,453.71; 1893-94, \$35,782.69; 1894-95, \$93,515.51; 1896-97, \$48,553.30. On the other hand, in 1895-96 extraordinary revenue, being chiefly the proceeds of the sale of real estate owned by the city, was used for ordinary purposes to the amount of \$114,629.82.

The publication further classified in a general way the expenditures of each department. It was not possible to make such a classification in any great detail, for the reason that the classifications contained in the Auditor's Report

vary from those contained in the reports of the several departments, and the latter have themselves varied from year to year. Only such comparisons were made, therefore, as could be made with a reasonable degree of accuracy. It was not attempted to show the relation between the expenditures and the work accomplished, because no satisfactory results in that line were obtainable within our means. The publication, however, well serves as a convenient index both to the Auditor's Report and to the department reports, in either of which the expenditures may be traced in further detail.

SPECIAL PUBLICATION, No. 2.

Later in the year we issued Special Publication No. 2, containing an account of the ordinary revenue of the city. This contained (1) a general statement showing the relation between the ordinary revenue and the whole revenue of the city in each of the five years, and (2) an analysis of the ordinary revenue for each year, showing how much of it was derived from taxes, and how much from licenses, fees, rents and other sources. The Auditor's Report already contains a statement showing to what extent the several items of income are derived from the different departments, and it did not, therefore, seem worth while to republish a table of that kind. The detail tables show in a comparative form, for a period of five years, the history of each particular class of the city's income. The tables of income from taxation, show not only the general taxes, but all special taxes, with references to the statutes under which they are collected, the amount of abatements and the amount and promptness of collections. It is creditable to the departments that the amount of the abatements is so small, and creditable both to the Collector and to the citizens that taxes are paid with such promptness and regularity.

While both of these publications are interesting in themselves, they are especially valuable as a basis for further investigations. In attempting to ascertain the cost of any work carried on by the city, it is of the utmost importance that all the expenditures which have been incurred in relation to it should be taken into consideration. In order to be sure that this has been done with thoroughness and accuracy, it is necessary, as a preliminary to the discussion of any item in an account, that its relation to the other items should be definitely known; and any person wishing to examine the expenditures of a particular department must

do all the work that has been done in compiling these publications, in order to insure the accuracy of his detailed investigations. Consequently, these publications are a necessary ground-work for further study. It is our intention that they shall be issued annually, showing always the receipts and expenditures for the five years preceding their publication. It will be readily seen that four-fifths of the context in any one year will be a reprint, while the remaining one-fifth will be new matter, and will contain the latest information. Such a reprint, showing the ordinary receipts and expenditures of the city for the five-year period ending with and including the year 1897-98, is now in the hands of the printer.

EXTRAORDINARY RECEIPTS AND EXPENDITURES.

It is especially desirable, in view of the question now so frequently discussed by the public, as to whether or not the city is borrowing money for purposes which it would be more prudent to provide for out of taxation, that a careful comparative statement of the extraordinary receipts and expenditures of the city should be compiled and published. The department has, therefore, worked steadily to that end, and has in view the publication of a statement, showing the extraordinary income of the city from the sale of bonds, from the sale of its real estate, water-works and other assets, and from sundry items incidental to the carrying on of such undertakings as are provided for by loan; and, on the side of expenditures, showing not only those permanent improvements which are provided for by loan, but also such as are provided for out of taxation, under the head of special appropriations, and outside of the ordinary work of the departments. The labor involved in compiling a clear and concise presentation of these expenditures is much greater than we anticipated; but the fact that several months of uninterrupted work by the larger part of the force employed in this department have been necessary to enable it to state intelligently the manner in which the city has expended the proceeds of loans in the last five years, is an eloquent argument for the necessity of such work.

Two years' experience with the published accounts of the city has now given our office force a training which enables them to deal intelligently with those accounts and to unravel their mysterious difficulties. They know that to ascertain the cost of any particular street, which may have amounted to only \$25,000, it is necessary to analyze and balance out

(1) the appropriations for "Blue Hill and Other Avenues," and for the "Laying-Out and Construction of Highways," each involving several millions of dollars; (2) the appropriations for street improvements by wards; (3) the appropriations for street improvements by aldermanic districts; (4) any special appropriations for this particular street (bearing in mind that the name may have been changed during the progress of the work); (5) the appropriations for the Sewer Department under various acts; and (6) the general maintenance appropriations of the Street Department. It is then necessary (7) to ascertain the cost of the street, as determined by the Street Commissioners, in order to find out what proportion of the cost has been charged to the abutters, and the final result is the cost of the street to the city. As frequently a street is not constructed until some time after it is laid out by the Street Commissioners, and as the period of construction often extends over more than one year, it is not sufficient to examine all these accounts for one year, but they must be examined for a series of years. All this would take an ordinary citizen about six months, provided he knows how to go at it. The department proposes to do this work for him, so that by turning to an alphabetical list he can ascertain immediately the whole history of any street on which any work has been done within the past five years.

Should the citizen be more interested in school-houses than in streets, and be tempted to look at the appropriation for some particular school, he will be surprised to find how little it cost. Perhaps he will be still more surprised to find that he overlooked (1) an appropriation for purchasing a site for a school-house in his ward; (2) an appropriation for grading the site for a school-house on a particular street; that he did not see (3) an appropriation for furnishing a school-house with an entirely different name; or (4) that a year or two later, a sum had been set apart for alterations and additions, or (5) for additional furnishing and equipment. Yet all these appropriations may relate to one and the same piece of work, although there is nothing within any one of them to furnish a clue to the others. We propose to bring all these appropriations together so that any person can see at a glance what the real cost of the property has been. Moreover, this publication will include a convenient summary of results, showing the general purposes for which the city has borrowed money during the period.

ANALYSIS OF CITY ACCOUNTS SINCE 1822.

It was partly for the purposes outlined in the foregoing paragraph, and partly for the purpose of ascertaining what proportion of the extraordinary expenditures of the city had been met by taxation and what proportion by loan, in various years, that the department began an examination of the accounts of the city from 1822 (the date of the City Charter) to the present time. The preliminaries of this work have been completed, and the department now has in its possession five volumes of ledgers, and a volume of trial balances taken off every five years, which together exhibit the expenditures of the city for permanent improvements during a period of seventy-six years. A reference to the ledger shows immediately the amount that has been expended upon any particular piece of property or for any particular piece of work; and, if the property has been sold within that time, it shows whether the sale was made at a profit or at a loss. The trial balances show, in summary form, the amount which has been expended by the city in every period of five years, under a dozen general headings such as streets, bridges, parks, school-houses, etc. These volumes, even in their present condition, are of value. They furnish a satisfactory basis for a scientific study of municipal expenditures, and they are serviceable to the members of the city government who may wish information in regard to any particular piece of property. As an instance of the latter form of use, it may be mentioned that this department was able to furnish to the Board of Estimate and Apportionment, at a few hours' notice, a statement of the amounts which had been expended for the various public institutions on the islands in the harbor, at South Boston, Charlestown, West Roxbury and at Pierce Farm. The work which has been done in this direction, however, is not sufficient to warrant publication as yet. It has been done entirely by one individual, and has not been verified. Certain difficulties, arising from a change in the name or use of various properties, have not been solved; and altogether the figures, while interesting and instructive, must so far be regarded as tentative only. Our experience in analyzing the expenditures in the past five years for extraordinary purposes has clearly demonstrated the necessity of thorough and exhaustive study of the material and a careful verification of all work before entering on publication. So far, however, as relates to the last five years, our study of the material is already well under way, and we expect to publish it during the coming year.

It will thus be seen that, within the year, the department has published in part and taken a long step towards completing and publishing, a critical analysis of the ordinary receipts and expenditures and of the extraordinary receipts and expenditures of the city. The compilation of the figures relating to trust-funds and to book-keeping items will be easily accomplished, and the department hopes to be able to publish next year a volume which shall contain a complete analysis of all the receipts and expenditures of the city which passed through the hands of the Auditor.

If we can go further and include the transactions of the Board of Commissioners of the Sinking Funds and the accounts of such trust-funds as are vested in the Trustees of the Public Library and in other boards of trustees in their corporate capacity, we shall be able to present a complete financial history of the city, for a period of five years, in a form which can be annually brought down to date and republished. The department will then be in a position to use these tables for comparative work, and for a detailed examination of the expenses of the departments and of their relation to the work accomplished. Our experience has demonstrated that about three years of preparatory work are necessary in order to make possible an intelligent and scientific study in detail of the finances of the city.

CLASSIFICATION OF ACCOUNTS.

In our last report, we referred to the fact that although the total expenditure of any department, as stated by the Auditor, and as stated in the department report, correspond, the details of this expenditure do not correspond, for the reason that the items are not classified in the same way in the two reports. A form of classification of the expenditures of the several institutions departments was recommended, and has presumably been followed during the past year, so that the forthcoming reports of those departments will correspond, in respect to the classification of their accounts, with the Auditor's Report.

We also referred to discrepancies existing in the names and descriptions of lands and buildings belonging to the city, as used in the different department reports. Some of these discrepancies have been brought to the attention of certain departments, and a greater degree of uniformity will doubtless be found in their reports for the coming year. Something further remains to be done in this direction, in order that a piece of city property may be traced through several

years of its history by a single designation, which may identify it, no matter what use the property is put to. It frequently occurs that the name of a school-house is changed, or property is abandoned for school purposes, and used for an engine-house or otherwise. It would seem to be desirable to assign a number to each piece of property belonging to the city, according to some general scheme of classification, as, for instance, numbering the school-houses from 1 to 500, the police stations from 500 to 600, engine-houses from 600 to 700, etc., or the properties might be numbered according to the year in which they were acquired. Thus properties owned by the city when it received its charter in 1822 might be numbered 2201, 2202, etc., and those acquired last year might be numbered 9801, 9802, etc. We are not prepared, however, to suggest definitely any scheme of this sort until our examination of the assets of the city is completed, and the cost and history of each property can be assigned to it, together with a corresponding number. It is not intended to do away with the names commonly in use, but simply to furnish a convenient means of identification.

MORE COMPLETE MAPS NEEDED.

We also referred in our last report to the desirability of securing more complete maps of the city, and more accurate and carefully arranged statistics as to areas, so as to show the extent to which municipal equipment, such as streets, schools, engine-houses, etc., in any given district, has already progressed or must be provided in the future; and in order to show, in greater detail, the cost of maintaining the streets, the density of population in relation to the accessibility of parks, playgrounds, schools, etc., and other similar facts. It was intended to use as a basis for such maps the surveys already made by the Street Commissioners, acting as a Board of Survey, but their plans cover only certain districts of the city, and in the districts which they have not yet covered the base lines have not been ascertained. It did not, therefore, seem desirable to attempt a compilation of details until the foundations of the work had been properly laid. The Street Commissioners have been interviewed on this subject, and have expressed a willingness to do such preliminary work, during the coming summer, as may be necessary to enable us to proceed. We have, however, contributed from our appropriation the sum of \$615 toward the preparation of a map of the City

Proper under the direction of the City Engineer, but it does not seem fair that the whole cost of such a map should be borne by this department; and the work has progressed more slowly than we could wish, on account of the necessity of securing contributions from the Water Department and the Street Department.

PERIODICAL PUBLICATIONS.

We also referred to the desirability of publishing a monthly bulletin, containing, in statistical form, the most recent information regarding the affairs of the city. Such a monthly bulletin would furnish a convenient basis for an annual compilation of statistics. Pressure of other work has prevented our carrying this plan into execution, but the work of gathering material for the coming year has already begun, and it is hoped that we may soon be in a position to issue a modest publication of this sort, the scope of which may be increased from time to time as additional information becomes available.

"* The City Record," the official gazette of the city of Boston, has been published weekly during the year, and an index of its contents has been carefully compiled. As an official record of executive action, it is a means of preserving, in convenient form for reference, much valuable information. There has appeared in it from time to time statistical information in regard to the city of Boston, or relating to other cities, which has proved both useful and interesting to those who were especially interested in the subjects to which it related.

The publication of the "Municipal Register," which has hitherto been undertaken by the Committee on Printing of the City Council, was this year intrusted to this department. It was late in the year before it was known that we were to undertake the work, and as numerous errors were found in the text of the previous editions, it was thought necessary to carefully examine and revise the whole material. For these reasons, and owing to some delay in printing, the volume was not published until late in the year. Much less labor will be involved in the preparation of this year's edition, and we have every reason to believe that it can be issued soon after the appointment and confirmation of those officials whose term of office begins on May first.

* The clerk at the Printing Plant gives the following figures for the circulation of THE CITY RECORD on February 1, 1899.

Paid subscribers	79
Free list (Boston)	440
" " (outside Boston)	56
Total	575

MISCELLANEOUS INQUIRIES.

In addition to the foregoing work the department has been asked, upon several occasions, to furnish information to His Honor the Mayor or to heads of departments concerning special subjects. Among these may be mentioned :

(1.) An inquiry concerning the methods employed by the leading institutions of the country in recording facts and compiling statistics relating to paupers, prisoners, neglected children and the insane. A circular letter was sent to 110 of the principal institutions in the United States devoted to the care of the classes mentioned. Based upon the replies received and upon an investigation of the institution records and statistics of the city of Boston, a special report upon institutions statistics was made to His Honor the Mayor.

(2.) An inquiry addressed to the city engineers and boards of public works of certain of the principal cities of the country in respect to the organization and administration of departments charged with levying special assessments for the construction of sewers and the watering of streets.

(3.) An inquiry, by means of letters sent to fifty-one cities in the United States and Canada, and to some of the principal cities in Europe, in regard to the equipment and maintenance of public playgrounds in city parks and open spaces.

(4.) A circular letter was sent to thirty-six European cities and five cities in Canada, and letters of inquiry were addressed to the school boards of several American cities, requesting information as to the general administrative and economic features of the schemes in practical operation for the purpose of providing retiring pensions and superannuation allowances for aged and incapacitated municipal officers and employees, and for aiding the families of deceased members of the civil service by grants or gratuities.

The replies to our request were unexpectedly full and numerous, so that the department is now in possession of authentic reports as to the character, cost and administration of the most typical forms of thrift-fund, benefit association, and pension scheme thus far adopted by British and Continental cities for the benefit of municipal civil servants, teachers and workmen. Complete and detailed salary schedules have been received from several important cities, which afford valuable and instructive data for a comparative study of the compensation of municipal officials and employees.

The correspondence of this department in respect to letters of inquiry from students and city officials in various parts of the world, and by reason of the letters referred to it for answer by the Mayor and the heads of departments is already considerable, and is increasing.

EXCHANGE AND COLLECTION OF DOCUMENTS.

One of the duties devolved upon this department is to facilitate the distribution of the public documents of the city among libraries and the executive departments of other cities, and to secure city-government and department reports

and publications in return. Our collection of general and special reports and of statistical publications is constantly growing in size and value, and already contains much material which is not contained in other libraries.

During the year 335 persons or institutions have received one or more of our publications (exclusive of their regular distribution among the departments of the city); and there are included in the foregoing statement eighty-one cities and forty-four statistical offices. Thanks to the facilities afforded us by the Smithsonian Institution in Washington, our exchange of documents and publications with foreign cities, etc., has been effected with a minimum of expense and trouble. We have forwarded to our correspondents, through the Smithsonian Institution, 156 packages, including seventy-eight sets of executive documents, for the year 1897.

Our office force now consists of a secretary, chief clerk, editorial clerk, special clerk, stenographer and office boy. We append a statement of expenditures and copies of the ordinances relating to the department.

Respectfully submitted,

LAURENCE MINOT, *Chairman.*

CHARLES F. FOLSOM.

DAVIS R. DEWEY.

B. RODMAN WELD.

SUMNER B. PEARMAIN.

WILLIAM JACKSON, *ex officio.*

APPENDIX.

STATEMENT OF EXPENDITURES.

STATISTICS DEPARTMENT.

General Classification of Expenditures 1898-1899.

Appropriation	.	.	.	.	.	.	.	.	.	\$9,000 00
---------------	---	---	---	---	---	---	---	---	---	------------

Expenditures.

1. Secretary	.	.	.	.	.	\$3,000 00	
2. Clerk-hire	.	.	.	.	.	3,628 10	
3. Travelling expenses	.	.	.	.	.	38 60	
4. Printing	.	.	.	.	.	1,270 54	
5. Stationery and supplies	.	.	.	.	.	89 37	
6. Furniture and repairs	.	.	.	.	.	197 56	
7. Postage	.	.	.	.	.	72 65	
8. Expressage	.	.	.	.	.	37 96	
9. Books and periodicals	.	.	.	.	.	49 85	
10. Maps	.	.	.	.	.	615 00	
							8,999 63
Balance unexpended	.	.	.	.	.		37

THE CITY RECORD.

*General Classification of Expenditures 1898-1899.**Receipts.*

Appropriation	.	.	.	.	.	\$7,500 00	
Receipts from advertisements	.	.	.	.	.	2,030 10	
“ “ subscription and sales	.	.	.	.	.	321 10	
							\$9,851 20

Expenditures.

1. Publication *	.	.	.	.	.	\$7,351 65	
2. Stationery and supplies	.	.	.	.	.	232 51	
3. Postage	.	.	.	.	.	123 74	
4. Rent	.	.	.	.	.	165 00	
5. Telephone service	.	.	.	.	.	73 50	
6. Books and periodicals	.	.	.	.	.	6 00	
Total	.	.	.	.	.		7,952 40
Balance unexpended	.	.	.	.	.		\$1,898 80

* The items of publication, \$7,351.65; stationery and supplies, \$232.51; and books and periodicals, \$6.00, amounting to \$7,590.16, in the above statement are classified by the Auditor as follows:

Printing, including			
(1.) Publication	.	.	\$7,351 65
(2.) Printing of stationery and supplies	.	.	148 70
Stationery and supplies, including books and periodicals (\$6.00)	.	.	\$7,500 35
			89 81
			<u>\$7,590 16</u>

ANALYSIS OF COST OF PUBLICATION OF THE CITY RECORD.

Number of Issue.	Gross Cost of Publication.	RECEIPTS FROM ADVERTISEMENTS.			Net Cost of Publication.	Number of Copies per Issue.	Number of Pages per Copy.	Number of Ems per Copy.	COST PER 1000 EMS FOR	
		Amount Charged.	Amount Collected.	Amount Un-collected, Jan. 31, 1899.					Composition.	Author's Corrections.
1.....	\$383 70	\$54 41	\$54 41	.....	\$329 29	2,000	16	106,600	\$2,525	\$.315
2.....	111 02	47 65	47 65	.....	63 37	1,500	8	56,700	1,227	.229
3.....	255 53	18 14	18 14	.....	197 39	1,000	12	77,800	1,548	.610
4.....	234 69	30 28	30 28	.....	204 41	1,100	16	98,700	1,548	.218
5.....	218 74	57 41	47 54	\$9 87	161 33	2,600	16	106,900	1,174	.275
6.....	444 19	35 64	19 51	16 13	408 55	2,000	32	209,300	1,364	.193
7.....	106 08	57 66	43 15	14 51	48 42	1,000	12	81,500	.850	.190
8.....	146 44	33 77	26 64	7 13	112 67	1,000	20	119,300	.850	.121
9.....	166 90	22 40	22 40	.....	144 50	1,000	16	125,000	1,003	.148
10.....	168 68	59 90	54 02	5 88	108 78	1,000	16	132,900	1,022	.071
11.....	173 58	61 15	61 15	.....	112 43	1,000	16	134,900	1,018	.077
12.....	172 90	43 15	43 15	.....	129 75	1,000	16	152,700	.892	.088
13.....	154 29	43 77	88 52	5 25	110 52	1,000	16	120,200	.992	.095
14.....	172 74	50 90	50 90	.....	121 84	1,000	20	140,500	.947	.067
15.....	180 20	62 06	62 06	.....	118 14	1,000	20	146,623	.938	.081
16.....	166 21	28 27	22 77	5 50	137 94	1,000	20	137,898	.917	.068
17.....	107 33	47 15	40 90	6 25	60 18	1,000	12	85,800	.907	.113
18.....	132 48	97 78	67 78	.....	64 70	1,000	16	101,385	.874	.185
19.....	139 70	67 16	91 41	5 75	42 54	1,000	16	109,585	.874	.172
20.....	110 44	48 53	35 03	13 50	61 91	1,000	12	79,120	.867	.238
21.....	129 29	54 52	54 52	.....	74 77	1,000	16	100,820	.863	.186
22.....	105 39	14 13	14 13	.....	91 26	800	12	71,390	.907	.263
23.....	115 43	54 17	54 17	.....	61 26	900	12	81,480	.910	.231
24.....	132 76	38 66	38 66	.....	94 10	900	16	108,920	.863	.181
25.....	107 40	60 91	60 91	.....	46 49	900	12	77,850	.850	.242
26.....	143 23	76 81	71 05	5 75	66 43	900	16	112,170	.893	.168
27.....	113 70	57 53	48 90	8 63	56 17	900	12	83,370	.869	.225
28.....	115 39	72 43	72 43	.....	42 96	900	12	84,000	.883	.224
29.....	107 48	30 26	30 26	.....	77 22	900	12	77,940	.850	.241
30.....	106 52	32 76	18 51	5 25	82 76	800	12	74,300	.887	.253
31.....	115 32	109 29	84 91	24 38	6 03	800	12	87,900	.850	.214
32.....	110 53	43 41	34 53	8 88	67 12	800	12	77,400	.903	.243
33.....	129 61	41 29	35 66	5 63	88 32	800	8	56,120	.948	.335
34.....	80 98	30 40	* 33 90	.....	50 58	800	8	53,450	.895	.352
35.....	129 50	65 79	65 79	.....	63 71	800	16	103,650	.850	.183
36.....	78 46	39 15	39 15	.....	39 31	800	8	59,300	.850	.353
37.....	109 40	38 16	27 28	10 88	71 24	800	8	79,360	.867	.237
38.....	83 22	48 54	42 54	6 00	34 68	800	8	58,900	.850	.319
39.....	157 40	23 02	17 64	5 38	134 38	800	20	123,750	.873	.162
40.....	126 36	19 75	19 74	.....	106 61	850	16	98,950	.850	.190
41.....	119 54	98 42	94 54	3 88	21 12	850	12	87,370	.900	.215
42.....	142 81	60 42	60 42	.....	82 39	1,300	16	105,030	.876	.179
43.....	112 73	50 64	50 64	.....	62 09	900	12	78,295	.913	.240
44.....	136 33	61 52	61 52	.....	74 81	800	16	107,140	.878	.175
45.....	102 64	31 39	4 00	27 39	71 25	800	12	76,702	.930	.124
46.....	116 32	74 31	4 50	69 81	42 01	800	12	91,550	.929	.104
47.....	103 54	56 05	3 63	52 42	47 49	800	12	79,990	.903	.119
48.....	106 65	38 28	.....	38 28	68 37	800	12	80,400	.937	.118
49.....	100 45	50 28	.....	50 28	50 17	800	12	78,100	.885	.122
50.....	96 84	21 38	5 00	16 38	75 46	800	12	78,100	.839	.122
51.....	116 85	29 26	3 75	25 51	87 59	800	16	98,700	.850	.096
52.....	93 74	6 63	.....	6 63	87 11	800	12	70,200	.889	.135
Total,	\$7,351 65	\$2,487 73	†\$2,030 10	\$461 13	\$4,863 92	51,400	736	5,012,008	\$50.577	\$10.095
Average..	\$141 38	\$47 84	\$39 04	\$8 87	\$93 54	988	14	96,384	\$0.973	\$0.194

* Owing to an oversight a bill for \$3.50 was charged and paid for twice.

† The total collections on account of THE CITY RECORD for the fiscal year ending January 31, 1899, amounted to \$2,351.20.

This sum includes collections for advertisements, as above...\$2,030 10

Leaving receipts for subscriptions and sales.....321 10

\$2,351 20

The City Collector classifies the collections as follows:

Collections for advertisements.....\$2,032 10

Sales and subscriptions.....319 10

\$2,351 20

§ There should be added to this amount the following items, bills for which were not received in time to be paid out of the appropriation for this year:

Illustrations, No. 42.....\$8 73

Illustrations, No. 43.....4 68

Index to Volume I.....202 32

\$215 73

Net cost as above.....

4,863 92

Corrected net cost.....\$5,079 65

ANALYSIS OF COST OF PUBLICATION OF THE CITY RECORD.

No. OF ISSUE.	Composi- tion.	Author's Corrections.*	Press- Work.	Stock.	Bind- ing.	Illus- trations.†	Wrapping, Addressing, and Delivery.	Miscel- laneous.	Total.
1.....	\$269 20	\$33 50	\$52 00	\$13 20	\$7 70	.....	\$8 10	.....	\$383 70
2.....	69 58	13 00	11 75	4 95	9 94	.....	1 80	.....	111 02
3.....	120 43	47 50	37 00	4 95	3 85	.....	1 80	.....	215 53
4.....	152 88	21 50	47 00	7 26	4 25	.....	1 80	.....	234 69
5.....	125 58	29 50	32 00	17 16	10 00	.....	3 00	\$1 50	218 74
6.....	285 50	40 50	60 00	26 40	9 35	\$17 49	1 95	3 00	444 19
7.....	69 28	15 50	10 00	4 95	3 85	.....	2 50	.....	106 08
8.....	101 41	14 50	15 00	8 28	4 75	.....	2 50	.....	146 44
9.....	125 45	18 50	10 00	6 60	3 85	.....	2 50	.....	166 90
10.....	135 73	9 50	10 00	6 60	3 85	.....	3 00	.....	168 68
11.....	137 43	10 50	10 00	8 80	3 85	.....	3 00	.....	173 58
12.....	135 95	13 50	10 00	6 60	3 85	.....	3 00	.....	172 90
13.....	119 84	11 50	10 00	6 60	3 85	.....	3 00	.....	154 29
14.....	132 59	9 50	15 00	8 25	4 40	.....	3 00	.....	172 74
15.....	137 55	12 00	15 00	8 25	4 40	.....	3 00	.....	180 20
16.....	126 06	9 50	15 00	8 25	4 40	.....	3 00	.....	166 21
17.....	76 03	9 50	10 00	4 95	3 85	.....	3 00	.....	107 33
18.....	88 58	18 80	10 00	8 25	3 85	.....	3 00	.....	132 48
19.....	95 80	18 80	10 00	8 25	3 85	.....	3 00	.....	139 70
20.....	68 60	18 80	10 00	6 19	3 85	.....	3 00	.....	110 44
21.....	87 04	18 80	10 00	6 60	3 85	.....	3 00	.....	129 29
22.....	64 79	18 80	10 00	4 95	3 85	.....	3 00	.....	105 39
23.....	74 20	18 80	10 00	5 58	3 85	.....	3 00	.....	115 43
24.....	89 68	18 80	10 00	7 43	3 85	.....	3 00	.....	132 76
25.....	66 17	18 80	10 00	5 58	3 85	.....	3 00	.....	107 40
26.....	100 15	18 80	10 00	7 43	3 85	.....	3 00	.....	143 23
27.....	72 47	18 80	10 00	5 58	3 85	.....	3 00	.....	113 70
28.....	74 16	18 80	10 00	5 58	3 85	.....	3 00	.....	115 39
29.....	66 25	18 80	10 00	5 58	3 85	.....	3 00	.....	107 48
30.....	65 92	18 80	10 00	4 95	3 85	.....	3 00	.....	106 52
31.....	74 72	18 80	10 00	4 95	3 85	.....	3 00	.....	115 32
32.....	69 93	18 80	10 00	4 95	3 85	.....	3 00	.....	110 53
33.....	53 22	18 80	5 00	3 30	3 05	43 24	3 00	.....	129 61
34.....	47 83	18 80	5 00	3 30	3 05	.....	3 00	.....	80 98
35.....	87 25	18 80	10 00	6 60	3 85	.....	3 00	.....	129 50
36.....	45 31	18 80	5 00	3 30	3 05	.....	3 00	.....	78 46
37.....	68 80	18 80	10 00	4 95	3 85	.....	3 00	.....	109 40
38.....	50 07	18 80	5 00	3 30	3 05	.....	3 00	.....	83 22
39.....	107 95	18 80	15 00	8 25	4 40	.....	3 00	.....	157 40
40.....	84 11	16 80	10 00	6 60	3 85	.....	3 00	.....	126 36
41.....	78 62	18 80	10 00	5 27	3 85	.....	3 00	.....	119 54
42.....	92 00	18 80	12 50	10 73	5 78	.....	3 00	.....	142 81
43.....	71 50	18 80	10 00	5 58	3 85	.....	3 00	.....	112 73
44.....	94 08	18 80	10 00	6 60	3 85	.....	3 00	.....	136 33
45.....	71 34	9 50	10 00	4 95	3 85	.....	3 00	.....	102 64
46.....	85 02	9 50	10 00	4 95	3 85	.....	3 00	.....	116 32
47.....	72 24	9 50	10 00	4 95	3 85	.....	3 00	.....	103 54
48.....	75 35	9 50	10 00	4 95	3 85	.....	3 00	.....	106 65
49.....	69 15	9 50	10 00	4 95	3 85	.....	3 00	.....	100 45
50.....	65 54	9 50	10 00	4 95	3 85	.....	3 00	.....	96 84
51.....	83 90	9 50	10 00	6 60	3 85	.....	3 00	.....	118 85
52.....	62 44	9 50	10 00	4 95	3 85	.....	3 00	.....	93 74
Total..	\$4,944 17	\$903 10	\$707 25	\$352 93	\$224 02	\$60 73	\$154 95	\$4 50	\$7,351 65

*Owing to a misunderstanding in the charge for "Author's Corrections," it was agreed, in the case of Nos. 13 to 44 inclusive, to take the average charge for that item in Nos. 1 to 17 inclusive (\$18.79+). A new method of estimating the cost of Author's Corrections was then agreed upon, and the charge, in Nos. 45 to 52 inclusive, represents an average cost of that item for those numbers as computed by the new method.

† See note §, page 13.

REVISED ORDINANCES OF 1898.—CHAPTER 37.*

STATISTICS DEPARTMENT.

SECTION 1. The statistics department shall be under the charge of a board to be known as the statistics trustees, consisting of six trustees, one of whom shall be the city engineer, *ex officio*; said board shall collect, compile, and publish such statistics relating to the city of Boston, and such statistics of other cities for purposes of comparison, as they may deem of public importance.

SECT. 2. Said board shall publish, at least once a week, an official gazette of the city, to be designated "The City Record." Said publication shall contain a copy of every advertisement or public notice issued by the several departments, a summary of all proposals received in response to the same, and a statement of all awards of contracts; and shall also contain such record of official action, and such other matters of interest to the city as said board may from time to time, with the approval of the mayor, direct. Said board shall cause said publication to be distributed regularly to the members of the city council, the several departments, and the press, as soon as published, and may provide for the sale to the public, by subscription or otherwise, of such number of copies thereof as the board shall deem expedient.

ORDINANCES OF 1898 — CHAPTER 6.

RELATIVE TO THE

ANNUAL REPORTS OF THE EXECUTIVE
DEPARTMENT.

(In the Year One Thousand Eight Hundred and Ninety-Eight.)

AN ORDINANCE AMENDING CHAPTER TWENTY-EIGHT OF THE
REVISED ORDINANCES OF 1892.

Be it ordained by the City Council of Boston, as follows:

SECT. 2. of Chapter 28 of the Revised Ordinances of 1892 is hereby amended by striking out the words "eight hundred" in the second line of said section, and by inserting the words "nine hundred" in place thereof; and by inserting after the word "year" in the sixteenth line thereof, the words "shall deliver to the Board of Municipal Statistics 100 sets of said volumes."

IN BOARD OF ALDERMEN, May 9, 1898.

Passed. Sent down for concurrence.

JOSEPH A. CONRY, *Chairman.*

IN COMMON COUNCIL, May 19, 1898.

Concurred.

TIMOTHY L. CONNOLLY, *President.*

Approved, May 24, 1898.

JOSIAH QUINCY, *Mayor.*

A true copy. Attest:

J. M. GALVIN, *City Clerk.*

* See also Chapter 2, Section 1, Revised Ordinances of 1898, page 9.

ANNUAL REPORT
OF THE
STREET DEPARTMENT,
FOR THE YEAR 1898.

[DOCUMENT 35—1899.]



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PART I.

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ANNUAL REPORT
OF THE
STREET DEPARTMENT
FOR THE YEAR 1898.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

SIR, — In compliance with the Revised Ordinances, the annual report of the operations and expenses of the Street Department for the year 1898 is herewith respectfully submitted.

ORGANIZATION.

The work of the department during the past year has been carried on under the same organization that was effected when the consolidated department was created in 1891 and as amended in 1895, the several divisions of the department being as follows :

Central Office.	Paving Division.
Boston and Cambridge	Sanitary Division.
Bridges.	Sewer Division.
Bridge Division.	Street-Cleaning Division.
Ferry Division.	Street-Watering Division.

Each of the above divisions, with the exception of the Central Office and the Boston and Cambridge Bridges, is in charge of a Deputy Superintendent.

The Boston and Cambridge Bridges are managed by two commissioners, the Superintendent of Streets being the commissioner for the city of Boston, the other commissioner being appointed by the Mayor of the city of Cambridge.

More extensive study than is given under this *résumé* of the year's work, with detail of figures and expenditure, will be found in the division reports of the Deputy Superintendents.

APPROPRIATIONS.

The money assigned for Street Department work the past year was made available under the following appropriations:

First. — Maintenance: At the commencement of the financial year, February 1, the department estimates of the amounts necessary for the proper maintenance of the various divisions are submitted to His Honor the Mayor, who makes such recommendation as he may deem proper to the City Council. The appropriations passed for this purpose were as follows:

Central Office	\$20,000 00
Bridge Division	130,000 00
Cambridge and Boston Bridges	15,000 00
Ferry Division	220,000 00
Paving Division	725,000 00
Sanitary Division	500,000 00
Sewer Division	350,000 00
Street-Cleaning Division	315,000 00
Street-Watering Division	138,728 57
Total	\$2,413,728 57

Second. — Special work done under loan appropriations for permanent improvements: There was made available from loan money, \$335,480 for new or reconstruction work, and in addition to this amount, balances and orders passed during the year for special items amounted as follows:

Bridge Division	\$69,587 20
Ferry Division	2,137 12
Paving Division	137,447 68
Sewer Division	28,000 00
Total	\$237,172 10

Third. — In 1891 an Act was passed by the Legislature and amended in 1897 entitled, "An Act Relating to the Location, Laying Out and Construction of Highways in the

Eighth — In 1897 an Act was passed by the Legislature, entitled, "An Act relative to the Sewerage Works of the City of Boston." (Chap 426.)

From this fund all "Sewerage Works" are built.

The amount expended the past year was \$1,490,743.50.

Thus the expenditures under the several appropriations of the year 1897 were as follows:

Maintenance	\$2,401,630 60
Street Improvements (by wards)	407,860 44
Bridge, specials	45,334 06
Ferry, specials	2,137 12
Paving, specials	81,669 72
Sewer, specials	25,000 00
Laying-Out and Construction of Highways, Blue Hill and Other Avenues (Boulevard Act)	434,372 74
Stony Brook Improvement	255,537 29
New Ferry Landing	94,434 76
New Ferry Boats	79,135 68
New Ferry Boats	50,463 60
South Union Station	120,264 56
Sewerage Works	1,490,743 50
Total	\$5,488,584 07

CONSTRUCTION WORK, STREETS AND AVENUES UNDER "323" AND "BOULEVARD" ACTS.

The following streets and avenues were under construction during the year, and have been wholly or partially completed at an expenditure of \$689,910.03 for both sewer and surface work:

Amory street.	Chamberlain street.
Angell street.	Chamblet street.
Ashley street.	Charlestown street.
Astor street.	Chiswick road.
Athelwold street.	Columbia road.
Belmore terrace.	Commonwealth avenue.
Belvidere street.	Devon street.
Bernard street.	Elizabeth street.
Bloomfield street.	Ellet street.
Burt street.	Fairmount street.
Callender street.	Fenelon street.
Canal street.	Forest Hills street.
Carlos street.	Fowler street.

Francis street.	Peverell street.
Fullerton street.	Queensberry street.
Gaylord street.	Rosseter street.
Geneva avenue.	Ruggles street.
Greenbrier street.	School street.
Hamilton street.	Shirley street.
Harold street.	Spencer street.
Hewins street.	Stanley street.
Idaho street.	St. Stephen street.
Ipswich street.	Stuart street.
Jersey street.	Telford street.
Leeds street.	Thane street.
Leedsville street.	Tonawanda street.
Leroy street.	Turner street.
Lonsdale street.	Vancouver street.
Malvern street.	Van Winkle street.
Maryland street.	Waterlow street.
Mellen street.	Wensley street.
Merlin street.	West Selden street.
Middleton street.	Wolcott street.
Millet street.	Woodlawn street.
Morse street.	Public Alley No. 401
Newburg street.	“ “ 402
Nightingale street.	“ “ 403
North Harvard street.	“ “ 404
Norway street.	“ “ 437
Oakley street.	“ “ 701
Peterborough street.	

In the past eight years Boston has undergone many and great changes, and along lines of broad and progressive development; and the citizens of Boston should fully appreciate the splendid work of these last few years, and as a result the tremendous possibilities for the future of the city. This work although costly, has built the foundation for the most desirable city for business or residence in this country. The foundation was built none too soon; and what has been accomplished, had the work been undertaken a few years later, would in part have been impossible, and in every way would have been vastly more expensive.

In these eight years have been brought to a conclusion — or are well under way — the abolishing of the railroad grade crossings, the building of the subway, the completion of the great Southern Terminal Station, the development in part of the vast new dock system, the improvement of the harbor, the building up of the park system, the perfecting of the

water supply, the beginning of the great new bridge to Charlestown, and the extension of the electric car service in all parts of the city; and in addition and in close connection with all this development has followed the work of the Street Department.

In the Street Department the work of the past three years has been the greatest in its history in amount and importance. In these years have been built the five great boulevards, which, branching out in different directions, have brought the outlying sections of the city in close touch with the city proper over well-built roads, supplied with sewer, water and gas, so that great areas of most desirable residential land are now available for the rapidly growing city. The increase in population in these years has been large, and through the development of its own territory this increase has been made possible, for the reason that the city has made it attractive for its people to stay within its borders.

In addition to the boulevards a great number of assessable streets have been built which greatly add to the value and beauty of the outlying wards. In the down-town section many of the most important thoroughfares have been repaved in the best manner. But fully as important, though, owing to its nature, not so much noted by the citizen, has been the work of perfecting the Boston sewerage system, so that now there is no other city in the country where the sewer system is so complete, and the difficulties to be overcome in the future so few. Prior to 1896 no action had been taken looking to a general relief from the very pressing need for surface drainage in the outlying districts; the great problem of Stony brook was only cared for in part; the large down-town Canal Street Relief Sewer, which served the needs of a large and very congested district, and the broken-down and bad condition of which had been reported on for years, was daily becoming worse; the Main Drainage Works plant, on the efficiency of which depended the health and comfort of the entire city, and the condition of which daily threatened most serious danger to the sewerage system of the city had received no attention for years; no connections had been made with the North Metropolitan system, although rent was being paid therefor by the City of Boston to the State, and the fouling of the shores of Charlestown and East Boston had become a serious nuisance; and the capacity of the basins at Moon Island was greatly overtaxed. All these conditions have been corrected, and the sewer problems of the future are now of the ordinary nature, which can be well cared for within a reasonable appropriation, and little is left undone that appears as a menace to the general health of the community.

In the matter of the removal of offal and other refuse the methods of a half a century were still pursued. All this has been changed, and the system now in use surpasses in its sanitary completeness and general arrangements that of any city in this country.

New methods in the Street-Cleaning Division have accomplished better results than ever before.

The Ferry Division has been thoroughly equipped with new slips and drops, two boats have been built and another is under way.

The only division which has not kept pace — owing to lack of appropriations — with the general work of the department and the growth of the city has been the Bridge Division. Many of the bridges are old, and should receive attention; but the City Council has not been able or seen fit to provide the necessary moneys.

The whole scheme of street watering has been changed, so that now every public street in the city is watered by the department, and the cost assessed on the abutters, thus doing away with the old haphazard way of doing the work by private subscription, and results have been attained not possible under the old system.

PAVING DIVISION.

Expenditures.

Maintenance.	Specials.
\$726,255.20.	\$1,258,079.39.

For expenditures under Laying Out and Construction of Highways, Blue Hill and Other Avenues, and South Union Station, see page 3.

This division has charge of the maintenance and reconstruction of about four hundred and eighty (480) miles of streets.

The following shows the amount and kind of reconstruction work done by the Paving Division during the year:

	Sq. yds.
Granite blocks on concrete base, with pitch-joints .	41,491
Granite blocks on gravel base, with pitch-joints .	2,676
Granite blocks on gravel base, with gravel-joints .	93,571
Asphalt	8,539
Macadam. See note.	

NOTE. — A very large portion of the work of the Paving Division is the reconstruction of macadam streets. The amount of this work is best shown by the number of feet of edgestone laid and set-up, gutters laid and relaid, and brick sidewalks laid and relaid, which are as follows:

Edgestone set and reset, 162,809 linear feet. Gutters laid and relaid, 37,279 square yards. Brick sidewalks laid and relaid, 71,813 square yards.

Crushed Stone, Ballast or Telford.*Output of Stone from City Crushers.*

	Crushed Stone Tons.	Telford Tons.
Bleiler's Ledge.....	16,221	451
Centre street crusher.....	31,510	
Chestnut Hill avenue crusher.....	1,473	
Codman street crusher.....	16,127	
Commonwealth avenue crusher.....	8,526	4,081
Dimock street crusher.....	16,362	
Rosseter street crusher.....	27,392	
Totals.....	117,611	4,532

From the maintenance appropriation of this division there was built a new stone crusher in the Brighton District, with a capacity of two hundred and twenty-five tons daily, with arrangement of bins for the storage of stone, and the whole plant is a very complete one.

In this division excellent results were accomplished as far as financial conditions would allow, but owing to the very considerable decrease in the moneys appropriated, the work was much less than conditions called for. This department for the past two years has advocated a general policy of the reconstruction and repaving of the down-town streets, so that Boston might take its place with other advanced municipalities as well paved and well cleaned. The amount made available, however, was only sufficient to do some of the more necessary work.

The average appropriation for new work under the general law (not assessable), since the consolidation of the department, which took place in 1891, has been \$850,000 per year. The appropriation for 1898 was \$448,000.

Work on the boulevards has made satisfactory progress and Columbus avenue is now completed with the exception of a short section between Centre and Ritchie streets, where one side is left uncompleted, work having been suspended in consequence of the cold weather.

On Blue Hill avenue no work has been done on the final section, owing to the failure to take action of the commis-



COMMONWEALTH AVENUE AT WASHINGTON STREET, BRIGHTON, UNDER CONSTRUCTION.

sioners appointed to make arrangements for the abolition of the grade crossing of the New England Railroad.

On Commonwealth avenue considerable work has been done, and the present Legislature, by the passage of chapter 236 of the Acts of 1898, has authorized the expenditure of a sum estimated as sufficient to complete the paving, with the added condition that the work be brought to a close before the year 1900. The plans of the avenue have been revised, and some changes made which, while lessening the cost, will be of benefit to the abutting estates and make the avenue much more attractive.

On Columbia road, from Blue Hill avenue to the New England Railroad, the road is completed and in use. Work has not been commenced upon the railroad bridge. From the bridge to Edward Everett square a large amount of work has been done. The grading is substantially completed, and nearly all the sewers, water-pipes and gas-pipes have been laid, and some work has been done on the surfacing. The contracts for construction require the work to be completed by July 1, 1899; and with the exception of the bridge above named, the progress already made indicates that it will be substantially completed at that time.

Work is also in progress on the erection of the bridge over the Plymouth Division of the New York, New Haven and Hartford Railroad, and on the filling of the section of the road and parkway between Covington and I streets. Proposals have been received for completing the grading of the section between Mercer and Mt. Vernon streets. Considerable filling has been done during the year on the latter section, under several small contracts.

On Ipswich street, the bridge over the Fens waterway, the abutments of the bridge to carry the park driveway over the street, a retaining wall along the line of the railroad, and iron fences on both sides of the street at the crossing of the Fens, have been finished, and a temporary wooden bridge to carry the park drive over the street has been erected.

The most important paving work was the reconstruction of Hanover street between Court and Washington streets, Howard street, Tremont street from Boylston street to Pleasant street, and Commercial street from State street to South Market street. These were paved with granite blocks, with pitch-joints, on a concrete base.

Other jobs of considerable size were Bunker Hill street, Charlestown, Tremont street, Roxbury, Norfolk avenue and Parker street, granite blocks on gravel base. Asphalt was

laid on portions of Shawmut avenue, Broadway, and Hayward place.

SOUTH UNION STATION.

During the past year the sea-wall on Dorchester avenue extension has been completed from Federal street to Summer street extension, and the street has been filled in, the temporary sidewalk built, and the roadway temporarily paved with granite blocks excepting a narrow strip adjoining a portion of the property of the Boston Terminal Company upon which the buildings and other structures have not as yet been so far completed as to allow the paving to be done. The work of widening Federal street bridge to connect it with the new street has also been done.

Summer street extension in front of the new station has been paved and the sidewalks built. The square formed by the intersection of Summer street and Atlantic avenue has been regraded and temporarily paved, the centre of the square having been raised about two and one-half feet. Atlantic avenue, between Summer street and Kneeland street, has been put in condition so that it can be used.

REMOVAL OF SNOW.

The regular work of the Paving Division has been considerably handicapped by the drain made upon the maintenance appropriation owing to the heavy expense of snow removal, the amount of snowfall exceeding any in the history of the department.

The loss of life and property caused by storm was so excessive and unusual that the story of the year's snow work in some detail is herewith given.

The new year of the department was ushered in by the great storm of January 31. Monday afternoon, January 31, the thermometer was stationary at about 32°, and the snow on the ground from the storm of January 26 was about six inches. In the late afternoon, the Weather Bureau reported that it might turn to rain or continue to snow; but there was no intimation given of the severe and unusual storm which followed. In the early evening it looked very threatening, and, as a matter of precaution, extra teams were ordered to report at 7 A.M. in the shopping district, the intention being to have that section of the city covered in the very early morning. All through the night the storm continued to increase, and by 1 A.M. traffic was practically suspended. The cars were stalled, the streets blocked by



STATE STREET SNOW DRIFT.



ADAMS SQUARE — SNOW.

fallen poles and wires, and from that time on, the snow, which had been wet—at times almost rain—continued. By early morning the thermometer had fallen to 20°, and continued falling until it reached 5° on the morning of February 2.

At 5.30 on the morning of February 1, the Street Department officials made arrangements for the work of the day. The department was greatly handicapped, however, from the fact that it was impossible to reach more than one or two districts by telephone, all overhead wire service being disabled. It was necessary to communicate with the district foremen, owners of teams and others, by messengers. By 7 o'clock a considerable force of contractors' teams and teams of the Paving and Street-Cleaning Divisions were at work on the main thoroughfares, and clearing away from the fire-houses. By 8 o'clock the Sanitary Division teams and men had been reached, and were added to the force of workers. As soon as possible, as many Sewer Division men as could be notified were ordered to report on snow work, so that by afternoon the entire available Street Department force and teams, and such additional contractors' teams as could be secured, were actively engaged in removing the snow. Thus, with the full force of the Paving, Street-Cleaning and Sewer Divisions, and a portion of the Sanitary men, work was carried on night and day, including Sunday.

As many men and teams were worked as could be to advantage. The number of dumps substantially regulates the entire work as only a limited number of teams can be used to advantage at each dump; and the number of men profitably engaged in work is in proportion to the number of teams. The difficulties of handling snow in Boston are increased by the scarcity of dumping-places. In this storm, owing to its severity, dumping was allowed on the Common, which greatly assisted in the work. In addition to the regular dumps, a small dump was also secured at Long Wharf, and at night the Sanitary dumping-wharf at Fort Hill was made available.

In Boston, unlike New York, the department must take into account the fact that the larger part of the teaming immediately goes on runners as soon as there is a substantial snowfall, and it is therefore not permissible to take the snow out of the streets entirely.

The conditions of the storm were a damp, heavy fall of snow, amounting to about 15 inches, followed by several days of low temperature, the thermometer ranging between 5° and 20°, thus creating a firm bed of packed snow which

turned to hard ice. As the temperature rose, this bed became full of cradle-holes, and the streets in some parts of the city, where the heaviest travel was, were almost impassable until the department had cleaned them to the paving. To do this it was necessary to pick the ice, and so, substantially, every business street in the city had first to be picked, before the bed of snow-ice could be removed, adding greatly to the cost and labor.

Another factor which made removal of the snow difficult and expensive was that, owing to the wet conditions at the time of its fall, the snow was banked on the roofs, and, on account of its weight, it was found necessary to shovel more than the usual number of roofs; and, as reported by the district foreman, who for a great number of years has had charge of the down-town district, more snow was thrown into the streets from roofs and areas than had ever been the case in his experience. This made it necessary, in a great number of streets, to do the work three times over.

The number of street department men employed on snow work was substantially as follows:

Paving Division	1,000
Sewer Division	500
Street-Cleaning Division	600
Sanitary Division (for a portion of the time)	300
Total	2,400

The number of hired teams employed in the work ranged from 300 to 850.

The amount charged to snow-work from February 1 to February 13, inclusive, was as follows:

LABOR ROLLS.

Paving and Sewer Divisions	\$38,747 39
Street-Cleaning Division	11,681 27
Sanitary Division	1,761 99
Total	\$52,190 65

COST OF TEAMS HIRED.

Paving Division	\$33,570 50
Street-Cleaning Division	2,488 25
Total	\$36,058 75



COMMONWEALTH AVENUE AFTER STORM OF JANUARY 31, 1898.



SWETT STREET AFTER STORM OF JANUARY 31, 1898.

In addition to the work as above, the department worked on snow Friday, February 4, Friday night and Saturday, February 5, and on Sunday, February 6, the entire force, including the Sanitary teams. The larger portion of the men of the Paving and Street-Cleaning Divisions, however, were continued on the final cleaning up of the snow until Thursday night, February 17. So to the above should be added, as an estimate, \$20,000 for the week's labor and teams, making a total cost of \$108,249.40.

The number of single loads removed, as reported from the dumps, is as follows:

Paving Division	103,915
Street-Cleaning Division	19,276
Total	123,191

The United States weather reports show that the snowfall amounted to 14.3 inches. The minimum temperature on Monday, the day of the storm, was 5°, and the maximum 32°. On the succeeding day, February 1, the thermometer ranged from 32° down to 10°; and this was followed by three days of very low temperature.

The second great storm of the financial year commenced in the evening on November 27, 1898. This storm is referred to as "the November blizzard," and the damage to shipping and the loss of life at sea was the greatest in the history of Boston and Massachusetts Bay. On the evening of November 26 the steamer "Portland," leaving Boston at 7 o'clock was caught, it is supposed, in the gale at some point below Cape Ann, and was lost somewhere in the bay, none surviving of upwards of 170 passengers and crew. The following is the story of this storm:

Saturday, November 26, was cloudy; wind north-east, velocity 11 miles per hour; the average temperature was 29°. Snow commenced falling at 7.37 P.M., wet and heavy. During the early morning hours of Sunday, the 27th, the wind increased to a hurricane, and by morning there was a heavy fall of snow, which in many places was badly drifted, and the city streets were almost blocked. Many of the overhead wires were broken, and the telephone and other service greatly disarranged. On but few lines of the Boston Elevated Railway Company were the cars running. The Street Department commenced work early Sunday morning, but the snow continuing, and the wind blowing with great force, it

was not possible to do much more than open lines of communication between the most important fire-houses and streets that had been made passable by the plows of the Boston Elevated.

At 1.45 P.M., Sunday, the snowfall amounted to twelve inches. On Monday, the 28th, with the thermometer at 29°, there was a slight additional snowfall of a half an inch. Tuesday was clear, and the thermometer registered 33°. Wednesday there was a further fall of snow, amounting to 5.3 inches, making a total snowfall to be cared for of nearly 18 inches; and the record shows that on Wednesday, November 30, at 8 P.M., there were sixteen inches of unmelted snow on the ground where no work had been done.

All the force of the department, Paving, Street-Cleaning, Sewer and Sanitary divisions, men and horses, were substantially put on snow work, the Sanitary forces being returned to their own work as the streets were opened up so as to make it possible for them to get access to the houses. Work was continued night and day throughout the week.

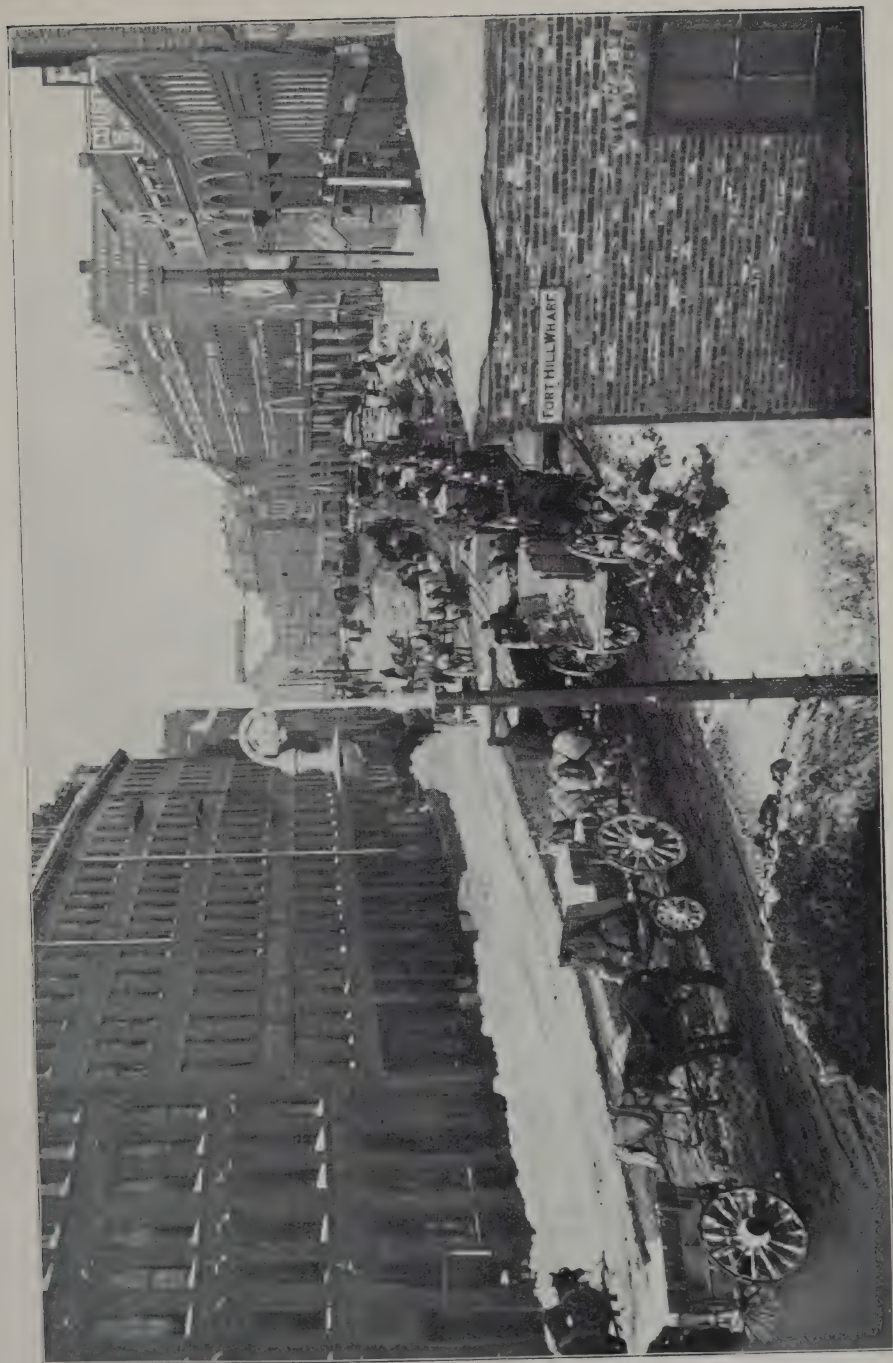
In streets where the travel was heavy the snow cradled badly, requiring the use of picks; and, in effect, from every downtown street the snow had to be carted, the temperature at no time through the week rising higher than slightly above the freezing point. The hill streets were impassable for two days, until the department was able to give them attention.

The work in the outlying districts was made heavy in some places by the tremendous drifts. Fortunately, however, the temperature did not at any time become excessively cold, so that by Sunday night a high wind and warm rain assisted greatly in bringing the streets back to a normal condition.

As compared with the snowfall of February 1 of this same year, the amount was slightly in excess; but the weather conditions were much more favorable to snow removal, so that, while the storm of February, 1898, cost in the neighborhood of \$100,000, the storm of November cost approximately \$50,000. The cost of snow removal for the financial year 1898-99 exceeds that of any year in the history of the department.

The scarcity of dumps has continued a serious obstacle in the way of the rapid and low-cost removal of the snow. The long hauls to, and the long waits at the dumps make much waste and extra labor.

The following is a statement of the number of days labor, number of days teaming, and the number of loads of snow



ATLANTIC AVENUE AT FORT HILL WHARF — SNOW TEAMS.

removed by the Street Department from Sunday, November 27, to Monday, December 5, 1898, inclusive:

Number days labor, Paving Division men	6,689
Number days labor, Street-Cleaning Division men	2,941
Number days labor, Sewer Division men	2,786
Number days labor, Sanitary Division men	279
Total number days labor	12,695
Number single teams employed	3,053
Number double teams employed	2,413
Number four-horse teams employed	25
Total number teams employed	5,491
Number single loads snow removed	56,695

In addition to the above, the greater portion of the Paving and Street-Cleaning forces were engaged on snow work for the following week.

The large amount of money required for snow work the present year emphasizes the recommendation made in the last two annual reports of this department that some provision be made for caring for snow, outside the maintenance appropriations of the Paving and Street-Cleaning Divisions. The maintenance appropriation of the Paving Division should be for the maintenance and care of the streets, and such other kindred duties as come within its regular province, for two reasons: first, that the cost of street maintenance from year to year could be compared; and secondly, that it might be possible, in making up the annual estimate of cost, to have a basis on which to figure.

This year the regular work of the Paving Division has been badly crippled the entire year in consequence of the tremendous inroad made on its maintenance appropriation by the storm of February. By careful management, it would have been possible, however, to end the year in this division almost within the appropriation, had it not been for this unusually early fall of snow. The snow cost in this one year was \$172,963.

It is not fair to those charged with the conduct of the work that, through conditions such as these, it should appear when the year is ended that they have been unable to so manage the finances of their department as to live within the appropriation allotted by the City Council; nor is it fair to

the citizen who expects a certain amount of street work to be done that, owing to weather conditions, he should be neglected. It is impossible to so plan the work that the officials in charge of the different districts of the Paving Division can be instructed or informed as to the amount which may become available for their regular work. Under the present arrangement, dependent upon the fall of snow in the early part of the financial year, the summer work is more or less governed: and there is no way of figuring what will come at the very end of the season in the way of cost of snow removal.

I urge at this time, with the experience of the past year as a lesson, that in the coming year appropriation be made for the regular work of the Paving and Street-Cleaning Divisions, and that some arrangement of moneys be made so that the cost of snow removal, whatever it may be, can be provided for from such further sum as may be set aside for that purpose.

PUBLIC ALLEYS.

In Boston, as in other cities, there are a great number of back passageways, known as alleys. With few exceptions, these were owned by private parties, and the city had no jurisdiction over them, either as regards cleaning or enforcement of city ordinances in reference to the throwing or sweeping of wastes into the street, and no power to bring about sanitary or safe conditions of paving. In some instances these created a most undesirable state of affairs.

These alleys in many cases are as important to those having occasion to use them for the delivery of goods as are the public streets. In a number of instances the department was appealed to by individual abutters, asking that some action be taken looking to repaving. Owing to the fact that it was oftentimes impossible for a number of abutters to jointly agree to do the work, but few alleys had been put in condition; and it was thought desirable on the part of the city authorities to ask legislation which would bring about a system of control. As a consequence, chapter 298 of the Acts of 1898 was passed by the Legislature. Under its provisions, any alley or passageway not exceeding twenty-five feet in width can be laid out and constructed at the expense of the abutters, in the same manner as an assessable street, such alleys not to be kept in repair, but to be cleaned at the expense of the city. Under this act twenty-three alleys and passageways were laid out as public alleys, and will be properly reconstructed during the coming season.



FORT HILL AND HECHT WHARVES — DUMPING SNOW.

Another serious source of inconvenience can be controlled under this act, and that is the blocking of these alleys with snow. It has been customary in certain districts of the city for the abutters to throw the yard and roof snow into the alley, thus making it impassable. In some alleys, by agreement, this snow was removed by contract; but in others, where agreement was not possible, the snow was allowed to remain to the great inconvenience of the city sanitary teams, as well as the various classes of merchants and tradespeople who found it necessary to use the alleys for the delivery of goods. An effort was made to secure the consent of the abutters to the removal of this snow by the city, the cost to be assessed on the individuals, but only in a few instances was this acceptable. The blocking of the alleys with snow, however, is now prevented by requiring a permit from the Superintendent of Streets to place this snow in the alley, and one of the conditions of the permit is that the applicant shall produce an agreement with some reliable contractor that the snow to be placed in the alley will be immediately removed.

In my opinion, the act should be amended so that authority would be given to the city to clear the alleys of snow at the expense of the abutters, for the reason that, as I believe, it could be done at less cost and more systematically than under the present plan of private contract.

Following is the text of the act:

[CHAPTER 298 OF THE ACTS OF 1898.]

AN ACT RELATIVE TO ALLEYS IN THE CITY OF
BOSTON.

Be it enacted, etc., as follows :

SECTION 1. The board of street commissioners of the city of Boston may, under the provisions of chapter three hundred and twenty-three of the acts of the year eighteen hundred and ninety-one and acts in amendment thereof or in addition thereto, lay out and construct any alley or passageway in the city of Boston not exceeding twenty-five feet in width as a public alley, and the provisions of said chapters shall, so far as applicable, apply to the laying out and construction of public alleys and the paying of the assessable cost thereof, as if they were laid out as highways, and any moneys applicable to the laying out and construction of highways under said act may be used for paying the expenses of laying out and constructing public alleys.

SECT. 2. Said city shall not be liable for any defect or want of repair in any public alley, nor be required to keep the same free from snow, but shall be required to keep the same free from any substance which is liable to cause sickness or a nuisance.

SECT. 3. Whoever drops or places and suffers to remain in any public alley any snow or ice, or any rubbish or obstruction of any kind, shall be fined not exceeding fifty dollars for each offence.

SECT. 4. This act shall take effect upon its acceptance by the city council of the city of Boston.—[*Approved April 8, 1898.*]

Accepted by the city council and approved by the Mayor, June 27, 1898.

PERMITS.

The matter of granting permits required by ordinance to be taken out for various kinds of work or occupation of the streets has received a great deal of careful attention; and with the co-operation of the police the system has been operated most successfully. Until 1897 no charge was made for permits, but that year, commencing with the first of January, a small charge was established; for instance, a charge of one dollar for permits to open and occupy the streets, and for the various minor permits twenty-five cents. It is estimated that this will return to the city the sum of twenty thousand dollars per year, which will about cover the cost of maintaining the Permit Office.

The following is the notice giving the cost of permits:

CITY OF BOSTON — STREET DEPARTMENT.

NOTICE TO CORPORATIONS AND CONTRACTORS.

On and after January 1, 1897, a charge will be made for each permit issued from the Permit Office of this department in accordance with the following schedule:

Class A, \$1 each.

Permits for the following purposes:

- Ordinary excavations;
- Laying drains;
- Laying wires, conduits and railroad tracks;
- Occupying streets for erecting and repairing buildings, and other purposes connected with buildings, when they do not become a part of another permit;
- Placing electric poles in the streets;
- Placing coal-holes and vaults under the sidewalks;
- Moving buildings;
- Feeding horses;
- Selling fruit, etc., from buildings;
- Selling fruit, etc., from areas;
- Occupying sidewalks for more than ten minutes for the purpose of loading and unloading goods (yearly permit);
- Driving cattle;
- Wearing advertising coat and hat (yearly permit);
- Making emergency openings.



SNOW DUMP ON THE COMMON.

Class B, 25 cents each.

Permits for the following purposes :

Raising and lowering goods into and from buildings ;
 Erecting signs ;
 Erecting and repairing awnings ;
 Projecting electric lamps ;
 Distributing fine sand on pavements ;
 Occupying sidewalk to repair sidewalk lights and covers ;
 Occupying sidewalk and portion of street for cleaning snow from
 roofs of buildings (yearly permit) ;
 Watering streets with watering carts.

On extensions of permits there will be a charge of 25 cents each.

BENJ. W. WELLS,
Superintendent of Streets.

SEWER DIVISION.

Expenditures.

Maintenance.

\$337,376.27

Specials.

\$1,610,178.26

In the last annual report was printed a copy of the Act Relative to the Sewerage Works of the City of Boston, passed in 1897. This act has made it possible to accomplish much valuable sewer work. As this law is now under fire from two different directions, first in the Legislature, and secondly in the Supreme Court, where its validity is to be tested, the following explanation of the reason and purpose of this act is desirable as a matter of record, and also in fairness to this department:

In February, 1896, the writer of this report assumed the office of Superintendent of Streets. His first duty was the study of the conditions and needs of the several divisions of the department. As a result of this study a report was presented to the Mayor showing that the conditions as regards sewerage works were such as to demand immediate action.

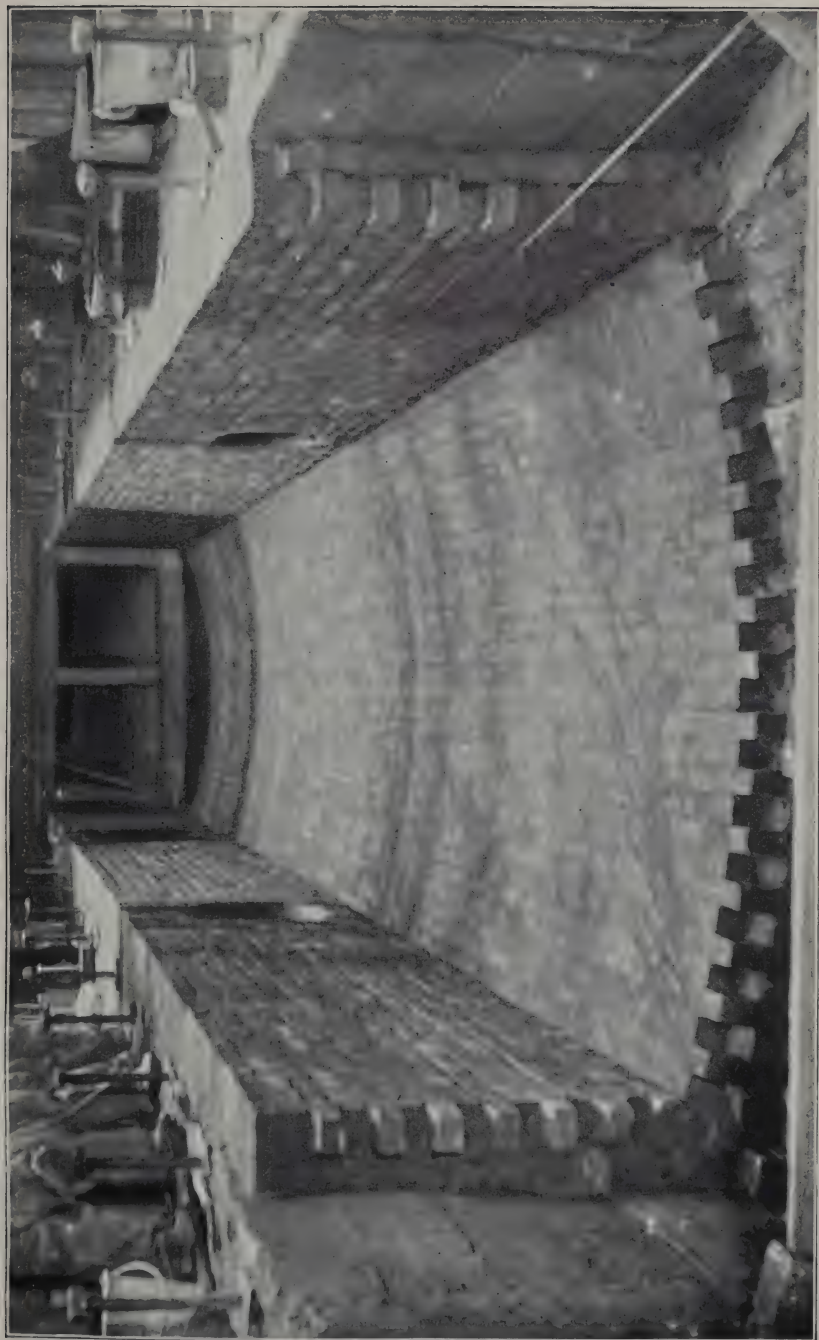
For many years sewerage works of the greatest importance and most urgently needed had been postponed from year to year until the time had arrived when further delay might bring about the most disastrous condition. The great pumping plant at the Cow Pasture, which had been in continuous operation for fifteen (15) years, had received so little

attention in the way of repairs that at any time a break might occur that would disable the entire sewer system of the city. The storage basins at Moon Island had more than reached their capacity, and the plan of discharging on the ebb tide could only be carried out in part. The so-called Canal Street Relief Sewer, serving the most thickly settled and important section of the city, referred to in the Street Department report of 1891, by Superintendent Carter, as in such condition as might bring about an outbreak of cholera unless at once attended to, was still on the list for attention. The sewage of Charlestown and East Boston was still being poured upon the shores of those districts, creating a most menacing nuisance; although the Metropolitan system of sewers, intended for the relief of these sections, was available, and rent to the State was being paid therefor, no connections therewith had been made. Several of the largest overflow sewers were broken down at the outlet, so that at times of storm entire districts were backed up and flooded. The problem of surface drainage, which had been troubling the department for some years, was unsolved. The demands of the citizens in the newly-developed parts of the city for house sewers could be met only in part.

This was the condition as regards the construction work. In the matter of proper maintenance of sewers, the department was also handicapped. The new features of this act were that a certain definite sum was annually authorized for the construction of sewers, and such money as might be needed for the maintenance of the sewers was made an assessable charge, according to the use of the sewer by the taxpayer.

No branch of municipal work has such close relations to the health and comfort of the community as the sewer system of a great city. Only those who have had the care, responsibility and direction of the sewerage system of Boston can appreciate the immense benefit which has come from the conditions made possible under the new sewerage act of 1897, which has been so criticised, so misrepresented, and which has been the subject of legal attack, and is now before the Supreme Court for decision as to its constitutionality.

It is a well recognized fact that to properly frame legislation for the building and assessing of sewerage works that will be satisfactory in all its workings is a most difficult proposition in every municipality.



CANAL STREET RELIEF SEWER, CROSSING UNDER PROPOSED SUBWAY IN HANOVER STREET.

SEWER LEGISLATION.

The first legislation on this subject affecting Boston was an Act past in 1709. All sewers and drains at that time were constructed and maintained by private individuals, and this first act simply required that permit be obtained from the selectmen of the town so that the "inconveniences and damages by frequent breaking up the highways, streets, and lanes," "for the laying and repairing of drains, or common shores, and of differences arising among partners in such drains, or common shores, about their proportion of the charge for making or repairing the same" might be prevented.

Various acts and ordinances were passed succeeding this, but not until 1837 was an ordinance enacted establishing the office of Superintendent of Sewers, and placing the matter under the control and direction of the city. After this, several acts and ordinances were passed in the attempt to more properly arrange for the building and assessing of these sewerage works.

In 1896, when Josiah Quincy became Mayor, the work of building sewers was carried on under the authority of chapter 418, of the Acts of 1892, and amendments. Under this act the assessment for house sewers was not to exceed \$4.00 for each lineal foot of sewer built. The overplus came from the general tax levy; and should the sewer cost less than \$4.00 per lineal foot the abutter received the benefit of the lower cost. Thus each year there was a very considerable deficit in the assessments, and the individual was benefited at the expense of the general tax-payer. The fund from which assessable sewers were built was the appropriation known as the "323 Act," which provided \$3,000,000 for the building of assessable streets and sewers. All sewerage works such as the Main Drainage Pumping Station, and reconstruction of sewers and outlets, must be provided for by concurrent vote of the City Council, and the money obtained by loan within the debt limit. Under this system the real estate holder, in sections of the city entirely unprovided with sewerage, was taxed in his general tax-bill for the construction, building and maintenance of sewers from which he could derive no benefit. Personal property — which certainly could not be affected by the construction and maintenance of sewerage works also stood its burden of the cost. Moreover, under this system, it was impossible for the City Council, with the very limited amount at its disposal — even if other demands more attractive to the ordinary city legislator did not take precedence — to properly provide for the

very pressing demand for sewerage works. An attack was made on the city by the Metropolitan Board of Sewerage Commissioners, and an effort made in the Legislature to take away from Boston all control of her sewerage works, and a part of the plea was that Boston did not adequately care for her sewerage system.

Another question which was becoming of such vital importance that some action became imperative was the problem of how to care for the surface drainage in the outlying districts. The old water courses had become obstructed by building operations, the sewers were not originally designed to take the surface flow, and whole districts were suffering in the wet season from lack of drainage. There was no provision of law whereby this matter could be taken in hand by the department.

Thus the problem presented was a serious one. The matter was taken in hand and carefully studied by experts and officials of the Sewer Division, and the results submitted to the city Law Department, with a view to perfecting an act which would give adequate relief, and at the same time assess the expense on those benefited by the construction and maintenance of sewerage works. As a result of this study, what afterwards became chapter 426 of the Acts of 1897 was formulated, introduced into the Legislature, and referred to the Committee on Metropolitan Affairs, who, after careful consideration and hearings, reported favorably, and the act was passed.

This act in substance provides that the City Council for the city of Boston shall annually appropriate sums not exceeding one million dollars in any one year for constructing sewerage works in said city, and shall also appropriate, to be met by annual charges such sums as the Mayor of said city should deem sufficient for maintaining and operating the sewerage works. All sewers, drains, pumping stations and other works for the collection or disposal of sewage or surface or ground water in said city shall be included in the term sewerage work as used in the act. It further provides that the Board of Street Commissioners, with the approval of the Mayor, shall order the construction of sewers or drains; that streams or water courses within the limits of said city may be filled up or diverted, widened, deepened, paved or covered by the order of said Board. Said Board is authorized to make takings for sewers, water courses, etc. The Superintendent of Streets or such other officer as the Mayor of said city shall from time to time direct shall carry out such orders. The Treasurer of said city, to meet



HALLECK STREET, SHOWING BROKEN DOWN SEWER.

the expenses incurred in constructing any sewerage works, shall from time to time and on the request of the Board of Street Commissioners, issue sewerage bonds. The Board of Street Commissioners, with the approval of the Mayor, are empowered to annually determine just and equitable sewerage charges to be paid by estates of said city for the construction, maintenance and operation of the sewerage works, as caused by each estate, the amount of use thereof, if any, by the estate or its occupants, and the benefit received therefrom by the estate.

Early in the year the Board of Street Commissioners authorized the Superintendent of Streets to submit to them a study and plan of making assessments under the act, and the subject was taken in hand by the Sewer Division of the Street Department. A special detail of department engineers and expert assistants with a sufficient clerical corps prepared the plans and figures, which were later submitted to the Board of Street Commissioners, and accepted by them, with the approval of His Honor the Mayor, and of the city Law Department.

The preparation of the plans and figures involved an immense amount of detail work; but early in September the figures and plans for the assessment were delivered to the Board of Street Commissioners, the Street Department keeping the control of the engineering account in connection with the sewer assessment work, this engineering force preparing the plans and obtaining the data on which future assessments will be based.

The system of assessments put into operation covering the expenditures of the past year is as follows:

The assessment was divided into two parts —

1. Maintenance and operation.
2. Construction.

For the first part, the maintenance and operation, the city government allowed \$350,000. One-quarter of that amount is assessed on all the estates of the city of Boston on the basis of land valuations, for the reason that all the estates in the city derive some benefit from sewerage works, through the maintenance of sewers, water courses and catch-basins which care for the surface water from the streets, and also for the benefits they receive from the use of public buildings, which are exempt from assessment. The remaining three-quarters is based on the water tax, and in this city it has been found that the proportion which this assessment should have to the water tax is about 1 to 5.

There are something over thirty classes of water-takers, and

allowance is made in each special class for such amount of water as is not returned to the sewers. The proceeds of this assessment are used for the care and maintenance of all the sewerage works.

Class 2, Construction, is sub-divided into three classes.

The first class is composed of main drainage, main channels and other large works of which the whole city derives a part of the benefits. This is assessed on all the estates according to their land valuation.

The second class of sewers, which are designated as district sewers or sub-mains, are assessed on district areas, the engineering force of the Sewer Division having divided the entire city into distinct drainage areas, and for the purpose of sewerage works each district is carried in a separate account.

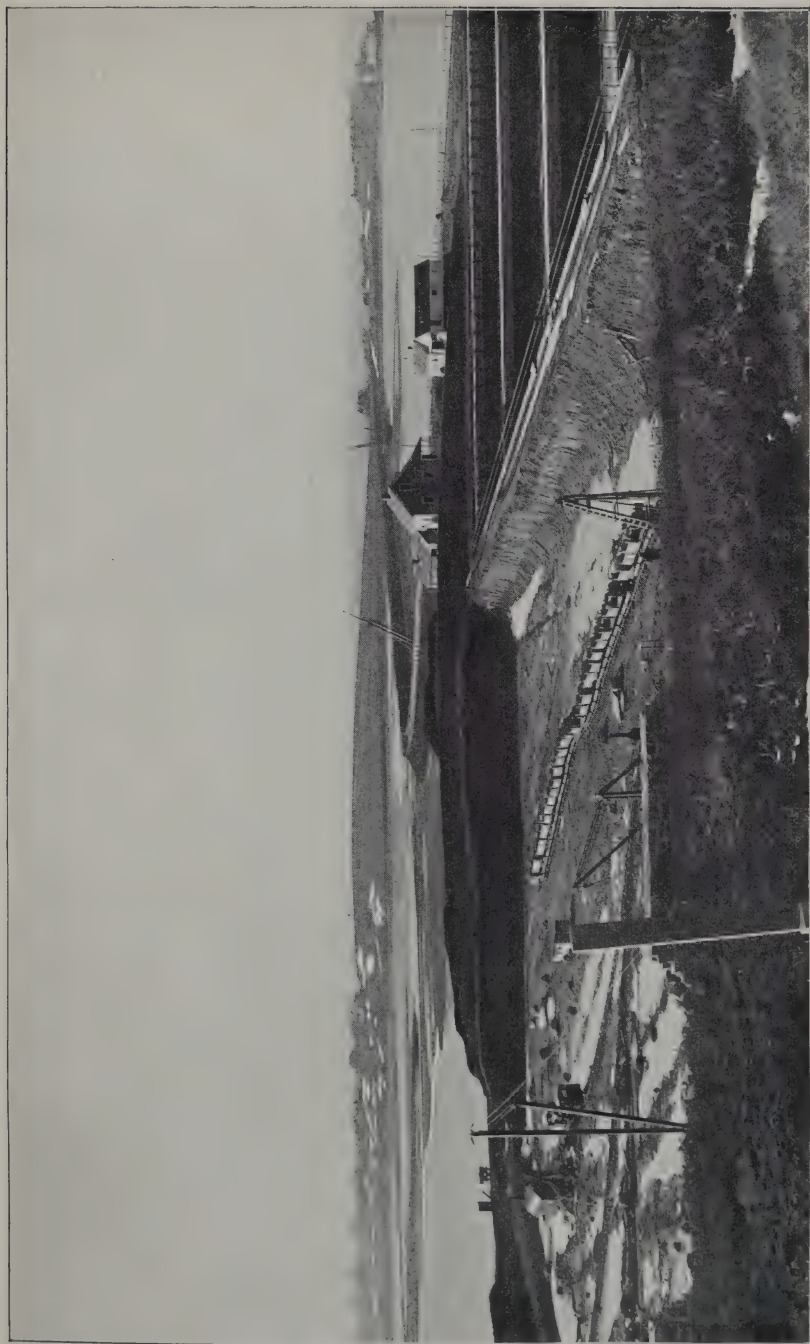
Third, lateral sewers, which are assessed on frontages to the amount of \$1.25 for each assessable foot, any cost in excess of this amount being charged on the district area; and, in case of any sewer costing less than \$1.25 per foot, the area is credited with the difference.

The assessment for construction is the amount of the sinking fund charges and interest on 30-year bonds.

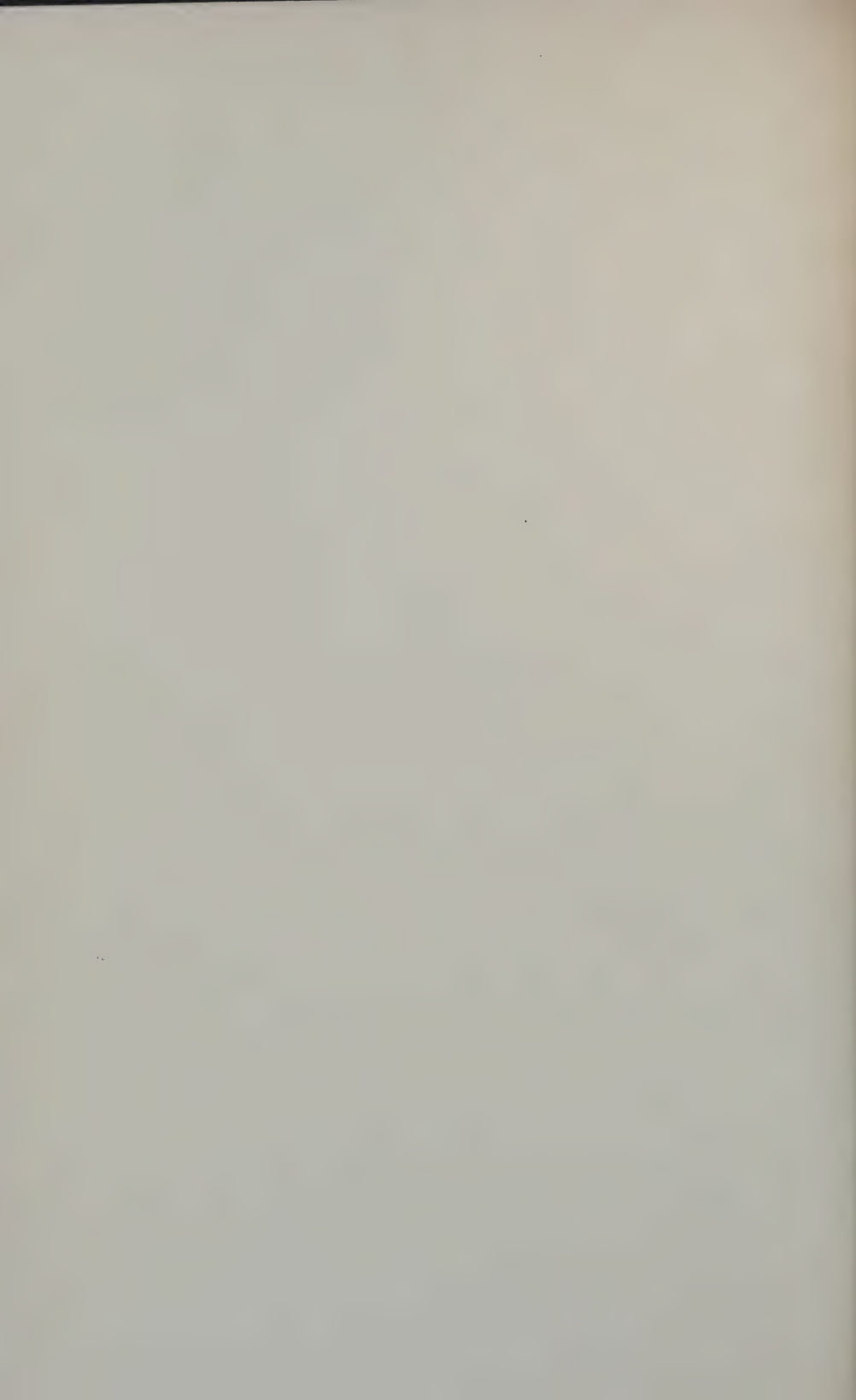
This, in a general way, explains the method of determining the sewerage charges. It may be that in practice the plan as adopted is not perfect in all its details, and some changes may be necessary in future assessments. The assessment, however, is determined by the Board of Street Commissioners each year, so that any defect in the present plan can be corrected, and but slight hardship entailed by any assessment of the past year.

As stated above, owing to the inability of the city under the old sewerage law to provide the necessary moneys to properly care for and extend its sewerage system, many large and difficult problems must be met and taken care of at the outset. In a few years, however, these larger works of construction will have been accomplished, the city provided with a perfect and comprehensive system of sewerage works, and the annual charges be greatly decreased. There will of course be some opposition to the tax, which comes as a new burden; but if the large tax-payers and real estate owners were to thoroughly consider the entire subject, I believe that they would be convinced of the great value of this act, whereby, without great hardship to any one, it is possible to perfectly develop and maintain the most important branch of city work.

During the two years that the department has been able to conduct its work under this act, the problems which had



EXTENSION OF RESERVOIR OF MAIN DRAINAGE SYSTEM AT MOON ISLAND.



been presented to every superintendent and administration for fifteen years were substantially cared for; and the city to-day is in a condition, as regards its Main Drainage System, the large overflows, the most expensive part of the great surface drains, and the rebuilding of certain broken-down sewers most important to the general health, which never could have been reached without this legislation. The problems of the future are comparatively unimportant, except as regards quantity, — that is, conditions dangerous to public health and safety have been remedied. There still remains to be cared for, however, the tremendous demand for house sewers which has been brought about by the building of the new avenues and the construction of certain lines* of main drains.

SANITARY DIVISION.

Expenditures.

\$508,152.88.

The past year the collections of this division were as follows: 394,937 loads, 54 cubic feet each, of house dirt and ashes, 57,764 loads of house offal.

The principal changes or improvements made in this division during the past year have been as follows:

A contract has been closed with the New England Sanitary Product Company for the utilization of about 78 per cent. of the swill collected in this city daily (the bulk of which was heretofore sold to farmers), with provisions for taking the balance whenever it is convenient for the city to deliver the same. The plant is located in an isolated section of the city which is known as the Cow Pasture, was started on the 15th of November, is now treating daily about 130 or 140 tons, and in a very short time (as soon as the new dumping place on the Roxbury Canal is completed) will take the balance of the amount contracted for, while in the near future the swill now collected in the East Boston and Dorchester districts will be treated in the same manner.

There has also been put in force a third separation, viz., separating the papers and other combustible waste from the ashes. The disposition of this class of waste has heretofore been a great nuisance to this department, as it is not desirable for filling, and, when towed to sea, it often floated back upon the neighboring beaches, causing considerable annoyance and some complaint.

This waste is now being separated in 55 per cent. of our daily collections of ashes, and the same carted to a new plant which has recently been erected near Fort Hill Wharf, and which has just gone into operation. The matter there will be sorted, the marketable portion culled out, and the balance burned.

In making this third separation the hearty co-operation of the public is desired.

There have also been purchased 30 new steel-bodied dumping wagons for collecting offal, which have displaced a like number of the old wooden ones heretofore used.

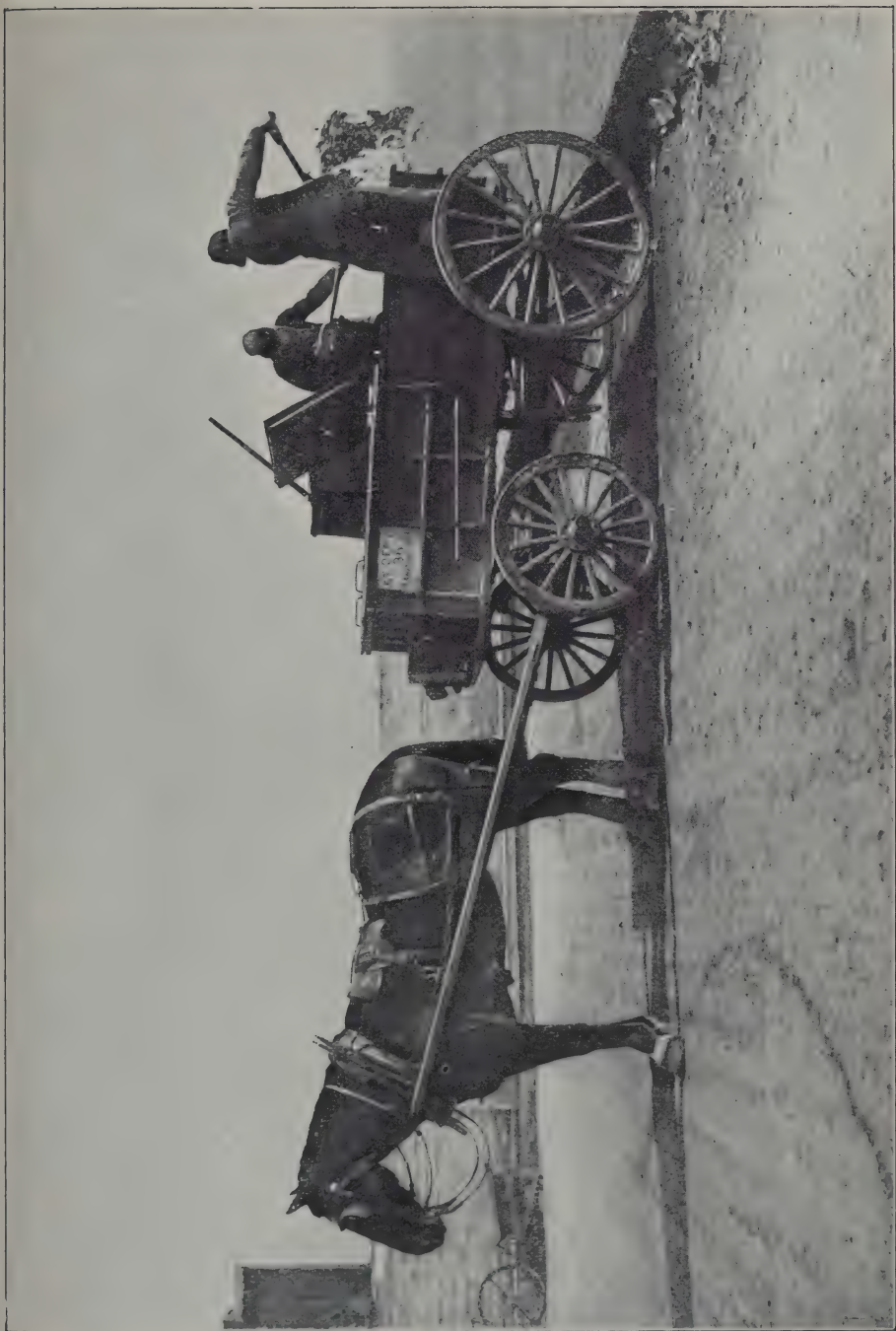
There has also been built a new dumping-plant at Fort Hill Wharf for the more expeditious and sanitary handling of the garbage. A similar plant, for a like purpose, is also being constructed on the Roxbury Canal at the foot of East Canton street, and will be ready for operation in a very short time.

With these changes in the methods of collection and disposal of garbage the system in Boston now surpasses that in use in any other city in this country. It is the purpose of the department during the coming year to still further improve the service, and by January 1, 1900, there will be little room left, as far as can be seen, for improvement.

The horses of the division are in excellent condition, many of the older ones having been replaced by the purchase of new animals. The stables have received such attention as has been possible from the maintenance appropriation, and the condition, while not all that might be desired, is fair.

The series of pictures shown in connection with the Sanitary Division illustrate the change from old to new methods. The first two pictures show the old way of collecting mixed waste materials, with the rag-pickers overhauling the barrels. This made a continual litter on the streets, besides being objected to by the Board of Health, on the ground that this material, carried into the houses, was likely to spread disease. Under the new system, householders and storekeepers are required to keep their combustible waste separate from the ashes. The police have stopped the overhauling of barrels by rag-pickers, and the improvement as regards cleanliness of streets is quite notable.

The third plate shows the interior of the plant where the combustible waste is cared for. What appears in the centre of the plate as a trough is the revolving belt, with the material carried past the men, each sorting into a chute (also shown in the picture), the material then passing below into the basement, where it is baled for shipment. The next plate shows the continuation of the belt, carrying the refuse,



UNLOADING GARBAGE — OLD METHOD.

which is of no value, into the furnaces, where it furnishes the fuel to operate the plant. The next plate shows the building erected for the purpose of handling the combustible wastes.

The next plate shows the loading of the farmers' wagons at the South End swill yard under the old system. It can be easily seen*that this method was most objectionable. In the first place the city wagons dumped the offal in great masses on the platform. This, being shoveled over into the farmers' wagons and again carted through the streets, was the source of constant and proper complaint. The offal from the central down-town section of the city was carried by barge and dumped in the bay, creating a constant nuisance and source of complaint to the dwellers along its shores. The next plate shows the offal wagons dumping their loads into the scow at the South End wharf, and there is also shown in this picture the change from the wooden box-carts to the iron carts. It will be noted that the old-fashioned box-carts, so long in use in Boston, are emptied by the men shoveling out the contents, whereas the new iron cart is simply dumped, and the load is disposed of in a few seconds.

The next picture shows the plant of the New England Sanitary Product Company at the Cow Pasture.

The shop work carried on under the direction of the deputy of the Sanitary Division has been continued with excellent results, the greater part of the shoeing of the horses, building and repairing of carts, harnesses, etc., of the department being done by this division.

STREET-CLEANING DIVISION.

Expenditures.

\$316,052.73.

Removed 131,705 loads of dirt.

The appropriation for the Street-Cleaning Division work remaining about as in past years it has not been possible to extend the service, as recommended in the last annual report, to Dorchester, Brighton and East Boston. The work in these districts now is either done by the Paving Division — which in the busy season is unable to give it proper attention — or a portion of the street-cleaning force is sent weekly or bi-weekly into these districts.

A change has been made in the manner of doing the work in the West and North ends of the city from machine sweeping

to hand sweeping, and the results attained have been so excellent that this method will be extended. The old way was to sweep the streets at night, two, three or four times a week, by machine. Under the present method the streets are divided into small sections, and swept by hand continuously. The expense has been but slightly greater, and the increase in cleanliness very apparent, as, under the old way, within a few hours after sweeping, paper and litter thrown into the streets would create an untidy appearance.

I again call attention to the failure on the part of the police to enforce the ordinances in regard to throwing waste materials into the streets, which, in certain sections of the city, makes it impossible to bring about better conditions without an expenditure of money which is unnecessary and unwarranted.

EMERGENCY WAGON.

Suggested by an occurrence which happened early in the year, a so-called emergency wagon and emergency corps have been established within the department. In February, during the progress of a fire, a building collapsed, carrying down with it a large number of firemen. This happening at an early hour in the morning it was not possible to at once get together a force of street department men to assist the firemen and police in their efforts to clear away the ruins. It was not until almost 7 o'clock that the men could be summoned to the work, when they were able to render substantial assistance.

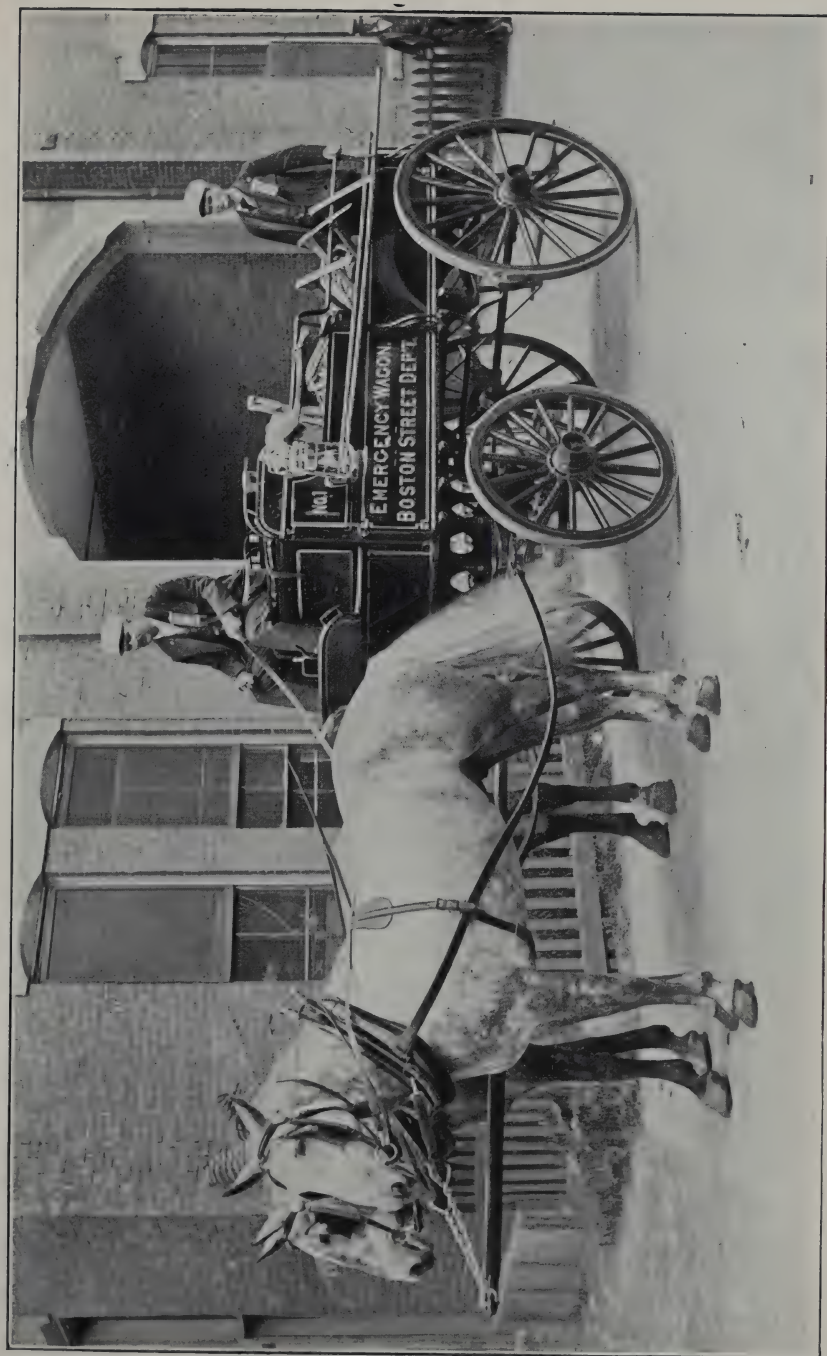
After perfecting the organization the following letter was sent to the Fire Commissioner, and a similar letter to the Board of Police:

BOSTON, October 4, 1898.

COL. H. S. RUSSELL, *Fire Commissioner*:

DEAR SIR, — I desire to notify you that this department has put into service a so-called emergency wagon, and that arrangements have also been made so that such a number of men as might be needed on an emergency call could be furnished from this department. The wagon is equipped with ropes, jacks, shovels, crowbars, axes, saws and such wrecking and other tools as might be of service in case of a falling building, fire or other accident.

Should occasion arise where this department can be of assistance to your force, a telephone message to City Hall 25 (West End Stables, North Grove street) will bring the wagon and such number of men as may be deemed necessary.



EMERGENCY WAGON.

The arrangement for summoning the men is as follows :

On call from the proper authority, the watchman at the yards will send, through the men living nearest to the yard, cards to a certain number of the men on the district to report at the yard. From that point they can be sent wherever needed. Those in charge of these men are instructed to report at the place of call to the officer in charge, and to take all instructions from him.

On very short notice quite a considerable number of men could be brought together in the down-town district, and the limit of the available force is not reached until a thousand or fifteen hundred men are called for.

Trusting that, should occasion arise, you will not hesitate to call upon this department, I beg to remain

Yours very truly,

(Signed)

BENJ. W. WELLS,

Superintendent of Streets.

BRIDGE DIVISION.

Maintenance.

Expenditure.

\$129,253.03.

Special.

Expenditure.

\$11,006.04.

New construction under charge of the City Engineer.

\$34,328.02.

In the Bridge Division, owing to the fact that absolutely no new money was appropriated except for the regular maintenance, there has been no work of any considerable importance undertaken. I cannot too strongly call the attention of the City Council to the necessity for action in relation to many of the bridges. Some are in need of almost entire reconstruction, and others should be thoroughly overhauled. There is also need for additional and improved machinery on several bridges to assist in the passage of vessels through the draws. The maintenance appropriation is but barely sufficient to care for the running expenses, such as the payment of draw-tenders, the purchase of supplies, and the most ordinary repairs. It is only by the most careful attention on the part of the deputy in charge that the bridges have been kept in running order, and accidents avoided.

FERRY DIVISION.

Maintenance.

Expenditure.

\$213,055.79.

Receipts.

\$165,001.57.

Specials.

Expenditure.

\$131,736.40.

Traffic.

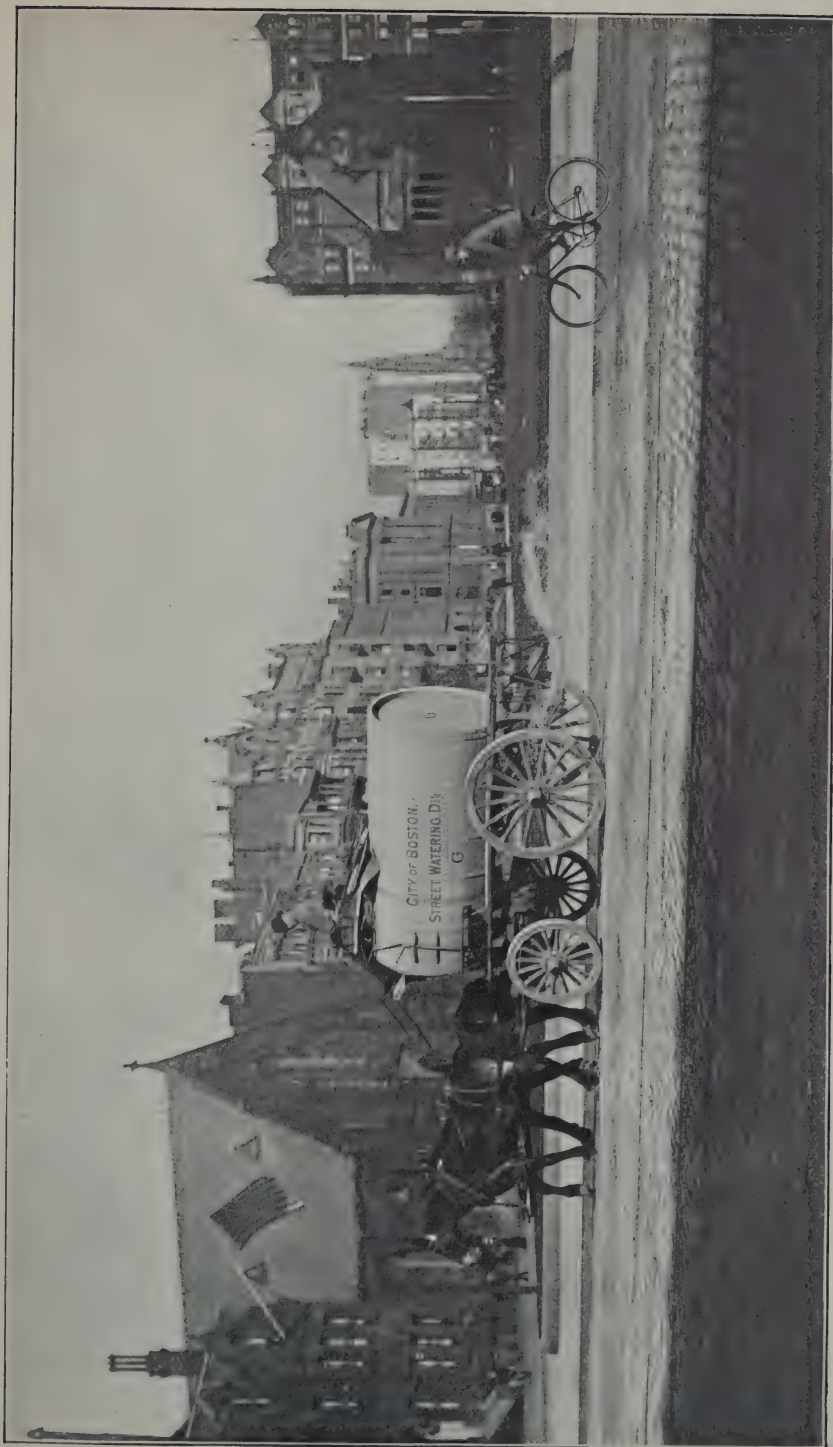
12,182,842 foot passengers.

938,140 teams.

The new boat, "Governor Russell," just ready to go into commission, was purchased by the United States government for war purposes, for the sum of \$71,000, the exact cost to the city. Also, the propeller ferry-boat "East Boston" was taken for the same purpose, for which was paid the sum of \$57,500, making a total of \$128,500. A contract was made for another new boat, which will be completed by February 15, 1899. Contracts for two new drops and tanks have been made, and these are now being put in place. This will make all the drops practically new, as the eight drops have been built since 1894; and it is expected that no new drops will be required for at least twenty years. Two slips have been sheathed at an expense of about \$4,000. This work was necessary, as if it had been left undone much longer new piling would have been required, which would have cost at least \$10,000 more. The work done in this line would last for ten years.

The boats, slips, tanks, landings and head-houses, with the exception of the South ferry, East Boston side, are in good condition, and no extraordinary expense will be required for some years.

Another new boat should be built, unless both the boats sold to the United States government should be repurchased.



STREET WATERING — CART AND INSPECTORS.

STREET-WATERING DIVISION.

Expenditure.

\$138,728.57.

Miles of streets watered, 409.95.

Prior to 1891, any watering of the city streets was done by private subscription. In that year a change was made, the city undertaking the watering of all macadam streets, leaving the paved streets to still be watered by the abutters. The appropriation for this work was taken from the general tax levy.

This method was unsatisfactory in many ways, for the reason that on the paved streets the difficulty or neglect of the individual abutters making arrangements led to very uncertain conditions, and also distributed the cost very unevenly.

The past year another change was inaugurated, the city undertaking the watering of all public streets, whether paved or not, assessing the cost of the work on the abutting estates, under authority of the statute authorizing all cities of 50,000 inhabitants and over to do street-watering by special assessment. Under this act, however, it was not possible to assess by districts. It was therefore thought best to omit, as far as possible, from the assessment the more sparsely settled districts of the city, where the frontages were very considerable and the cost might bear as a burden upon the estates. The line was drawn to substantially include the territory within four miles of City Hall, and all estates within this line abutting on public streets were assessed five cents per front foot for the street-watering, the portion of the city outside of the four-mile limit being cared for out of the general tax levy.

The statute should be amended so that it would be possible to assess the watering by districts, in order that the sections of the city requiring and receiving the greater service and the greater benefit should pay proportionally.

As a result of the change the service rendered by the Street-Watering Division has given great satisfaction, and this very important branch of the public service has been maintained at its proper standard.

In the report of the Division Superintendent (see Appendix G) this ground is more fully covered, with the detail of the figures and the act giving authority for doing the work in this manner.

One electric watering car was in service during the

season, and gave excellent satisfaction. It was not possible to extend the system, owing to certain uncontrollable conditions.

SMOKE NUISANCE.

Under the authority of an act passed by the Legislature in 1895 in relation to the preventing of smoke nuisance, the Mayor appoints the Superintendent of Streets as the official to enforce the law. The matter is handled by an inspector, and two assistants. I think there is less trouble from this source in Boston, perhaps, than in many other large cities. At the same time, it is only constant activity on the part of the Street Department that prevents the growth of the evil.

The department keeps well in touch with the owners of large steam plants, and also with the coal dealers. There has been very little friction, and all seem willing to co-operate as far as possible in keeping good conditions. At certain times, owing to the scarcity of proper grades of coal, there is a temptation on the part of both dealers and consumers to substitute low-grade smoky coal. In these times the work of the department is made more difficult.

The report of the Chief Inspector, Appendix I., gives the number of inspections and general detail of the work.

PURCHASE OF SUPPLIES.

A most important factor in the proper administration of a large department is the purchase of supplies. This branch of the work has been given most careful and faithful attention by the Purchasing Agent of the department, to whom warrants for all stock and materials are sent, and, with the approval of the Superintendent, purchases made for all divisions.

The volume of business can be understood from the fact that in the past year 9,639 requisitions were made for supplies ordered by the various divisions. Advantage has been taken of the market, when possible, and goods bought by the quantity.

BOSTON AND CAMBRIDGE BRIDGES.

By an act of the Legislature, chapter 467, Acts of 1898, in addition to the bridges already under their charge, all bridges between Boston and Cambridge were placed under the care of the Commissioners for the Boston and Cambridge bridges, thus taking from the Boston Bridge Division and putting under the control of the Boston and Cambridge Commissioners the following additional bridges :

Essex street, Cambridge street, North Harvard street and Western avenue bridge to Cambridge.

As substantially all the bridges are old and in more or less poor condition, constant attention and supervision are required to avoid accidents and keep them in good condition for travel. I have again to thank my fellow Commissioner, Mr. William J. Marvin, of Cambridge, for the excellent results and conditions which have been brought about by his careful and constant work.

I would earnestly recommend the building of a new bridge between old Cambridge and Brighton at North Harvard street. This street has been widened and constructed on both the Boston and the Cambridge sides, and the connection is made by an extremely narrow and old bridge. As this is the bridge leading to the Soldiers' Field, where the college sports are held, and is also the main thoroughfare connecting Cambridge with the new Metropolitan park, and also with Boston, some action should be taken at the coming session of the Legislature to provide a more suitable bridge.

A special commission, consisting of Hon. Josiah Quincy, Mayor of Boston, Hon. Edgar R. Champlin, Mayor of Cambridge, and E. D. Leavitt, Consulting Engineer, was appointed under an act of the Legislature to construct the new West Boston bridge to Cambridge; and plans for this structure are well in hand, and other work will be proceeded with the coming season.

Craigie's Bridge.

On the south side of the Boston end of this bridge the sidewalk had settled, and hard pine, eight by twelve inches, was placed the whole length to keep it in place.

A new bulkhead and fence have been built on the north side of the Cambridge end of this bridge four hundred feet in length, commencing at the draw. A brick sidewalk has been laid, curbstone reset, and roadway paved from the curb to the track. The paving on other parts of the bridge has been repaired, and the brick sidewalk on the old part has been relaid. The fence on the north side of the bridge and part of that on the south side has been given two coats of paint.

The roadway has been swept and cleaned; the bridge watered three times every day when necessary, from April to November.

The draw has been sheathed.

Ordinary repairs and sweeping and cleaning snow from the sidewalks are done by the draw-tender and assistants.

Before deciding the grade to be established on Bridge street, near the entrance to Austin street, where the city of Cambridge and Boston and Maine Railroad Company are to build an overhead street, it would be well to consider what the rise of grade will be and the width and the side to be widened when a new bridge will be built to take the place of the present Craigie's bridge. A part of this bridge on the Boston end and also on the Cambridge end, is in very poor condition. Some of the piles in the Cambridge end have been in position about one hundred years. Trusses have been put under it, holes cut in the bridge, and piles driven through to strengthen it.

The draw is worn out. It is also too narrow. Teams and cars cannot pass over together.

The traffic on this bridge is immense and increasing every year. One-half of the travel comes from places outside of Cambridge.

By the time the new Cambridge bridge is built to take the place of West Boston bridge, a new bridge, as wide and as good as this new bridge will be, will have to be built to take the place of Craigie's bridge.

Harvard Bridge.

In November, 1897, the roadway for the entire length of the bridge was newly sheathed. Heretofore this sheathing was renewed every year, either in October or November. This year by looking after it carefully and patching when necessary, we expect to carry it through until spring. By putting down new sheathing in April we will have a smooth surface all summer which will be much better for vehicles and bicycles. We required more room for storage, etc., at house on pier, and added to the present structure twelve feet by fourteen feet, one story, and painted it and the building connected with it. The greater part of the work was done by the draw-tenders on the bridge. The iron work underneath the surface of the bridge, where the salt water comes in contact with it, rusts very badly. We had the worst places scraped and painted. The work was done by the men on the bridge. Next year all the ironwork the whole length and width of the bridge will have to be painted.

Other parts of the bridge are in fairly good condition. In April the Welsbach light on the Boston end of the bridge was put on. The contract expires in April, 1899.

The bicycle path put down last November, three feet wide on each side of the bridge near the curb, seems to give good

satisfaction to the riders of these vehicles. Ordinary repairs on the bridge, keeping the electric light globes clean and in order, the sidewalks free from snow in winter and cleaning the bridge, is done by the draw-tender and his assistants.

Prison Point Bridge.

This bridge is kept in as good repair as is possible. It being old we do not care to expend a large amount on it. We expect the Boston and Maine Railroad Company will soon build an overhead street. When they do a new draw will then take the place of the old one.

The draw-tender keeps the bridge clean, and does ordinary repairs.

West Boston Bridge.

The Boston end of this bridge had settled. To keep it in place three trusses were put under the roadway.

The under plank on the roadway of the draw were replaced by new three-inch plank, and new sheathing laid over them. The bridge is in very poor condition, and is going to be replaced by a new one. No more work is done than is necessary to make the bridge safe for travel. The bridge was watered three times daily from April 1 to November 1.

The ordinary repairs, repairing, paving, and cleaning the bridge have been attended to.

The draw-tender and assistants have swept and cleaned the snow from sidewalks and piers, when necessary, and have made the repairs.

A temporary bridge is being built on the south side of this bridge to take its place while building the new one. This new bridge, when completed, will be named the Cambridge bridge.

Cambridge-street Bridge.

This bridge is in fair condition. New chains for hoisting the draw were put in place. Repairs were made on the bridge, draw and piers; and the small houses on the piers were repaired.

One arc light has been placed on the Cambridge end of this bridge.

Essex-street Bridge.

This bridge is in very good condition, having been rebuilt two years ago.

The draw-tenders do all ordinary repairs, such as sweeping the bridge and repairing sheathing on bridge and draw. A small building for tools and storage was placed on the

pier; the work was done by the men employed on the bridge.

New chains for hoisting draw were put on.

The bridge was poorly lighted. There were only two arc lights the whole length of the bridge, and travel at night was unsafe. Three new arc lights have been added, two Boston side, one Cambridge side.

North Harvard-street Bridge.

Repairs have been made on this bridge, draw, piers and small houses on piers.

This bridge ought to be replaced with a new, wider and more modern one. Cambridge has widened Boylston street, Boston is now widening and raising the grade of North Harvard street.

The park on the borders of Charles river, on Cambridge side, is very fine.

Extensive improvements now being made on the Boston side of the Charles river for a park and speedway, when all are completed, will make this part of the river quite ornamental. A bridge at this place should be in keeping with the surroundings.

Western-avenue Bridge.

Repairs were made on the roadway, draw and small houses.

The planking in the waterway, piers and guard were repaired.

One arc light has been placed on the Cambridge end of this bridge.

IN GENERAL.

The usual statement is appended showing the number of draw openings and the number of vessels which passed through.

The amount of revenue received for rents, dockage, repairs to Boston Elevated Railway Company's tracks, etc., has been \$1,292.40, and one-half, \$646.20, has been paid to each city.

The following is a statement of the payments made by the city of Boston on account of the Boston and Cambridge bridges from February 1, 1898, to January 31, 1899:

Amount of appropriation for financial year of	
1898-99	\$15,000 00
Expended to January 31, 1899	13,569 89
Balance February 1, 1899	\$1,430 11

Classification of Expenses.

	Canal or Craigie's Bridge.	Harvard Bridge.	Prison Point Bridge.	West Boston Bridge.	Cambridge Street Bridge.	Essex Street Bridge.	N. Harvard Street Bridge.	Western Ave. to Cam- bridge.	General Account.	Totals.
Salaries	\$1,552 50	\$1,340 00	\$379 47	\$1,352 00	\$206 90	\$349 00	\$176 39	\$206 97	\$250 00	\$5,813 23
Electric light	245 20	775 50	.....	441 34	.....	.....	.....	.....	.....	1,462 04
Lumber	489 38	127 54	84 12	227 00	80 97	122 97	55 90	67 72	.....	1,264 69
Repairing sidewalk and fence	1,198 63	.....	.....	.....	.....	.....	.....	.....	.....	1,198 63
General repairs	353 97	179 01	83 19	214 18	68 75	.....	32 43	28 88	.....	960 41
Inspection, 1898	207 50	117 50	52 50	92 50	25 00	.....	35 00	30 00	.....	560 00
Cleaning bridges	149 05	65 75	.....	174 00	.....	.....	.....	.....	.....	388 80
Gas light .....	.....	305 33	.....	.....	.....	.....	.....	.....	.....	305 33
Watering roadways	131 25	.....	.....	131 25	.....	.....	.....	.....	.....	262 50
Paving	131 25	.....	28 94	94 28	.....	.....	.....	.....	.....	254 47
Fuel	136 24	13 47	.....	84 99	6 73	10 11	.....	.....	.....	251 54
Electric current .....	.....	150 00	.....	.....	.....	.....	.....	.....	.....	150 00
Ironwork	20 94	29 55	19 78	35 84	10 71	22 64	3 96	2 03	.....	145 45
Tools and hardware	68 85	7 88	12 55	21 42	15 54	4 06	1 58	8 05	.....	139 93
Electric repairs .....	.....	113 82	.....	.....	.....	.....	.....	.....	.....	113 82
Sundry small supplies	44 24	30 35	1 25	15 75	7 08	4 59	81	1 75	.....	106 42
Paint and painting	41 18	5 00	.....	3 71	1 00	10 58	1 00	1 00	.....	63 47
Travelling expenses .....	.....	.....	.....	.....	.....	.....	.....	.....	52 50	52 50
Water rates	16 00	.....	5 50	11 00	.....	.....	.....	.....	.....	32 50
Stationery .....	.....	.....	.....	.....	.....	.....	.....	.....	29 82	29 82
Printing .....	.....	.....	.....	.....	.....	.....	.....	.....	14 34	14 34
Totals	\$4,786 18	\$3,260 70	\$667 30	\$2,899 35	\$432 28	\$523 95	\$307 07	\$346 40	\$346 66	\$13,569 89

Number of times the Draws in Canal, Harvard, Prison Point, and West Boston Bridges have been opened and the number of vessels which have passed through, for the year beginning February 1, 1898, and ending January 31, 1899.

DATE.	CANAL.		HARVARD.		PRISON POINT.		WEST BOSTON.		* CAMBRIDGE STREET.		* ESSEX STREET.		* NO. HARVARD STREET.		* WESTERN AVENUE.	
	Number of Draws Openings.	Number of Vessels Passed Through.	Number of Draws Openings.	Number of Vessels Passed Through.	Number of Draws Openings.	Number of Vessels Passed Through.	Number of Draws Openings.	Number of Vessels Passed Through.	Number of Draws Openings.	Number of Vessels Passed Through.	Number of Draws Openings.	Number of Vessels Passed Through.	Number of Draws Openings.	Number of Vessels Passed Through.	Number of Draws Openings.	Number of Vessels Passed Through.
February 1, 1898, to January 31, 1899.																
February	71	99	8	8	16	23	13	15								
March	344	355	106	130	15	21	134	224								
April	283	419	260	286	14	18	129	224								
May	321	488	239	275	37	54	177	312								
June	270	390	200	238	36	57	116	218								
July	358	404	114	150	36	50	137	235	107	287	88	145	85	266	98	255
August	328	494	164	188	32	47	188	310	181	557	104	173	115	342	179	550
September	318	506	137	150	45	69	133	229	119	338	80	136	67	126	108	310
October	406	298	123	133	26	40	130	220	86	304	60	102	36	57	79	307
November	262	462	178	207	50	79	158	255	89	169	96	169	63	133	77	153
December	226	428	154	204	36	55	129	278	66	119	81	159	43	86	42	75
January, 1899	171	260	30	34	70	119	54	105	14	25	17	28	.....	.....	4	8
Totals	3,358	4,563	1,713	2,003	413	632	1,498	2,655	632	1,799	536	912	409	1,010	587	1,658

* July 1, 1898, to January 31, 1899, inclusive.

Revenue, February 1, 1898, to January 31, 1899.

DATE. 1898.	L. B. 4 Pages.	Received from.	Totals.	One-half City of Boston, City Collector.	One-half City of Cambridge, W. J. M.
June 16....	169	Wharfage, rents, etc.....	\$339 00	\$169 50	\$169 50
Aug. 29....	206	Boston Elevated Ry. Co...	560 40	280 20	280 20
Dec. 7....	238	Wharfage, rents, etc.....	193 00	96 50	96 50
1899.					
Jan. 4....	260	N. E. Tel. & Tel. Co.....	200 00	100 00	100 00
		Totals.....	\$1,292 40	\$646 20	\$646 20

SUMMARY OF WORK DONE.

BRIDGE DIVISION.

Overhauled and repaired the following bridges, viz.:

Broadway, Charles river, Congress street, Mt. Washington avenue, Warren, Ferdinand street and Hyde Park avenue over Stony brook.

Talbot-avenue bridge was completed this year, the entire work of grading and building the bridge so as to allow the street to pass under the New York, New Haven and Hartford Railroad (Midland Division), being done by the railroad company at an expense to the city of \$25,000.

FERRY DIVISION.

One boat was hauled out on the railway and stripped and calked.

Two new drops and tanks were built and placed in position, and two piers were stripped and planked.

One new ferry-boat, "Governor Russell," was built and with the "East Boston" was sold to the United States Government, and a contract made for another boat, which is now building.

PAVING DIVISION.

Paved and regulated 14 streets with granite blocks, 41,491 square yards on concrete base and 96,247 square yards on gravel base, or a total of about 137,738 square yards.

Thirty-seven thousand two hundred and eighty-four square yards of gutters paved, 162,809 linear feet of edgestone set and reset.

Eight thousand five hundred and thirty-nine square yards asphalt on a concrete base.

Sidewalks laid and relaid as follows, viz.:

Brick, 71,813 square yards.

Crushed stone, 25,390 square yards.

Artificial stone, 15,797 square yards.

Work has progressed on 32 streets, laid out and ordered constructed under the "323" Act, and 20 of these have been finished.

SEWER DIVISION.

Built 38.37 miles of sewers, 671 new catch-basins, flushed 201 miles of sewers, removed 808 cubic yards of deposit from sewers and 8,670 cubic yards of sludge from the Pumping Station, cleaned 6,061 catch-basins removing 19,735 cubic yards of deposit.

SANITARY DIVISION.

Collected and removed 394,937 loads of 54 cubic feet each of house dirt and 57,764 loads of house offal.

STREET-CLEANING DIVISION.

Removed 131,705 loads of street sweepings, etc., and emptied 27,148 public waste barrels.

STREET WATERING DIVISION.

Watered 409.95 miles of streets.

EMPLOYMENT OF LABOR.

The report of the Civil Service Clerk, showing the classification of the employees of the department and the transfers and requisitions made for the several divisions of the department, will be found in Appendix J.

The detailed financial statements, work done, etc., will be found in the Central Office Report and the eleven appendices following.

Respectfully submitted,

BENJ. W. WELLS,

Superintendent of Streets.

CENTRAL OFFICE DIVISION.

EXPENSES OF THE CENTRAL OFFICE.

For the current expenses of the Central Office the City Council appropriated the sum of twenty thousand (20,000) dollars, which was expended as follows :

Salaries	\$15,786 67
General office expenditures	3,399 57
Total	\$19,186 24

leaving a balance of eight hundred thirteen dollars and seventy-six cents (\$813.76), which was transferred as follows, viz.:

To the Street Cleaning Division	\$450 44
To the City Treasury	363 32
	<u>\$813 76</u>

FINANCIAL STATEMENT OF THE STREET DEPARTMENT APPROPRIATION.

From February 1, 1898, to January 31, 1899.
MAINTENANCE.

APPROPRIATION.	Appropriations and transfers during 1898.	Revenue.	Total Credits.	Expenditures for the twelve months ending January 31, 1899.	Balances January 31, 1899.
Street Department:					
Central Office.....	1 \$19,549 56	.....	\$19,549 56	\$19,186 24	\$363 32
Bridge Division.....	2 129,253 03	.....	129,253 03	129,253 03	
Boston and Cambridge Bridges.....	3 15,000 00	.....	15,000 00	13,569 89	1,430 11
Ferry Division.....	4 213,055 79	.....	213,055 79	213,055 79	
Paving Division.....	5 725,000 00	.....	725,255 20	726,255 20	
Sanitary Division.....	6 507,152 88	\$1,255 20	508,408 08	508,152 88	
Sewer Division.....	7 750,000 00	1,000 00	750,000 00	357,376 27	12,623 73
Street Cleaning Division.....	8 315,988 74	.....	316,032 73	316,052 73	
Street Watering Division.....	9 138,728 57	63 99	138,728 57	138,728 57	
Totals.....	\$2,413,728 57	\$2,319 19	\$2,416,047 76	\$2,401,030 60	\$14,417 16
1 Appropriation 1898-99.....	\$20,000 00		\$220,000 00	7 Appropriation 1898-99.....	\$350,000 00
Transferred to Street Cleaning Division.....	450 44		6,944 21	8 Appropriation 1898-99.....	\$315,000 00
	\$19,549 56		\$213,055 79	Work done for corporations.....	63 99
2 Appropriation 1898-99.....	\$130,000 00		\$725,000 00	Transferred from Bridge Division.....	538 30
Transferred to Street Cleaning Division.....	\$58 30		1,255 20	Transferred from Central Office.....	450 44
3 Appropriation 1898-99.....	746 97		\$726,255 20	9 Appropriation 1898-99.....	\$316,052 73
Transferred to Sanitary Division.....	208 67		\$500,000 00	Transferred from "General Revenue".....	\$10,000 00
			1,000 00		128,728 57
			6,944 21		
			208 67		\$138,728 57
4 Appropriation 1898-99.....	\$129,253 03		\$508,152 88	10 Transferred to City Treasury.	
	\$15,000 00				

Comparative Table showing Cost of Maintenance of the Street Department since Organization.

DIVISION.	1891-92. (13 months.)	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.
Central Office.....	¹ \$16,050 00	\$18,793 60	\$20,805 96	\$20,884 29	\$18,315 79	\$18,781 85	\$17,789 95	\$19,186 24
Bridge	123,010 63	128,954 87	133,159 24	130,137 21	119,716 00	119,963 55	126,529 82	129,253 03
Boston and Cambridge Bridges.	11,866 42	11,079 76	11,493 16	11,986 85	12,637 33	13,835 54	14,403 92	13,569 89
Ferry.....	.....	.....	.....	.....	209,911 30	218,353 10	219,953 24	213,055 79
Paving.....	872,496 40	915,460 99	745,681 52	715,608 62	683,899 42	628,675 46	630,187 34	726,255 20
Sanitary.....	² 509,342 24	469,370 74	481,300 63	467,459 02	432,778 52	477,241 54	492,670 56	508,152 88
Sewer.	446,222 69	560,608 19	373,517 38	304,133 40	280,596 07	276,615 25	295,522 25	337,376 27
Street Cleaning.....	³ 215,929 33	288,320 42	308,707 30	301,477 44	305,998 50	310,266 39	309,493 38	316,032 73
Street Watering.....	104,263 62	94,507 80	99,430 16	87,169 08	76,424 70	71,211 81	578,736 72	138,728 57
Totals.....	\$2,299,621 33	\$2,487,095 87	\$2,174,005 35	\$2,038,855 91	⁴ \$2,140,177 63	\$2,134,944 49	\$2,245,816 68	\$2,401,630 60

¹ Nine months only.² Includes street cleaning for four months to May 1, 1891.³ Nine months only, but includes expenditure for Street Police, May 1 to July 10, 1891 — \$464.41.⁴ For comparison, deduct Ferry Division, not before shown, making total — \$1,939,266.33.⁵ Not including water bills of \$76,930.40 not previously paid by Street Watering Division.

Bridge Division Specials.

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1898, to Jan. 31, 1899.	Balances on hand Jan. 31, 1899.
Gold-street Bridge.....	\$9,328 02	\$9,328 02	
Harvard-street Bridge.....	2,643 80	335 91	\$2,307 89
Lauriat-avenue Bridge.....	1,000 00	.....	21,000 00
Reconstruction of Bridges.....	11,615 38	10,670 13	945 25
Talbot-avenue Bridge.....	25,000 00	25,000 00	
Totals	\$69,587 20	\$45,334 06	\$24,253 14

Ferry Division Specials.

Electric lights for ferry-boats.....	\$2,137 12	\$2,137 12	
New ferry-boats.....	128,500 00	50,463 60	\$78,036 40
New ferry landing (chapter 435, Acts of 1895).....	435,742 19	79,135 68	356,606 51
Totals.....	\$566,379 31	\$131,736 40	\$434,642 91

Paving Division Specials.

Abolishment of Grade Crossings.....	\$6,905 37	\$6,905 37	
Albany street, in front of Massachusetts Homœopathic Hospital.....	4,359 92	1,222 00	\$3,137 92
Alford street.....	10,000 00	10,000 00	
Atlantic street.....	10,000 00	6,441 71	3,558 29
Beacham street.....	9,000 00	3,878 39	5,121 61
Brighton avenue.....	1,408 03	1,072 91	335 12
Brooks street.....	35,000 00	3,000 00	32,000 00
Cabot street.....	207 52	207 52	
Carleton street.....	208 09	208 09	
Centre street, Ward 20.....	1,250 00	1,250 00	
Charlestown Bridge.....	14,712 61	14,712 61	
Commonwealth avenue.....	4,105 54	.....	4,105 54
Dudley street.....	1,139 00	1,139 00	
Eleanor and Ridgemont streets.....	605 51	.....	605 51
Freeport street.....	7,406 25	6,372 98	1,033 27
Hull street.....	6,851 63	6,851 63	
North Margin street.....	152 89	152 89	
Quincy street.....	277 71	277 71	
Carried forward.....	\$113,590 07	\$63,692 81	\$49,897 26

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1898, to Jan. 31, 1899.	Balances on hand Jan. 31, 1899.
<i>Brought forward</i>	\$113,590 07	\$63,692 81	\$49,897 26
Rand street.....	1,604 55	1,604 55	
Rapid Transit.....	17,500 00	16,265 06	1,234 94
Sydney street.....	253 06		253 06
Washington street.....	4,500 00	107 30	4,392 70
Totals.....	\$137,447 68	\$81,669 72	\$55,777 96

Street Improvements.

Street Improvements, Ward 1.....	\$6,000 00	\$6,000 00	
Street Improvements, Ward 2.....	6,000 00	6,000 00	
Street Improvements, Ward 3.....	26,493 91	26,493 91	
Street Improvements, Ward 4.....	19,421 13	14,488 78	\$4,932 35
Street Improvements, Ward 5.....	6,283 16	6,165 17	117 99
Street Improvements, Ward 6.....	22,705 96	22,705 96	
Street Improvements, Ward 7.....	20,194 53	20,194 53	
Street Improvements, Ward 8.....	21,210 96	19,874 66	1,336 30
Street Improvements, Ward 9.....	20,116 34	17,955 16	2,161 18
Street Improvements, Ward 10.....	13,619 36	12,922 87	696 49
Street Improvements, Ward 11.....	6,000 00	6,000 00	
Street Improvements, Ward 12.....	15,255 04	13,481 83	1,773 21
Street Improvements, Ward 13.....	9,197 51	8,304 65	892 86
Street Improvements, Ward 14.....	11,781 46	11,087 59	693 87
Street Improvements, Ward 15.....	19,266 81	16,091 85	3,174 96
Street Improvements, Ward 16.....	18,797 25	13,771 74	5,025 51
Street Improvements, Ward 17.....	13,960 00	10,976 23	2,983 77
Street Improvements, Ward 18.....	20,077 14	20,077 14	
Street Improvements, Ward 19.....	20,199 31	12,547 34	7,651 97
Street Improvements, Ward 20.....	13,960 00	13,960 00	
Street Improvements, Ward 21.....	6,000 00	6,000 00	
Street Improvements, Ward 22.....	13,960 00	13,086 29	873 71
Street Improvements, Ward 23.....	13,960 00	13,301 91	658 09
Street Improvements, Ward 24.....	13,960 00	13,960 00	
Street Improvements, Ward 25.....	6,000 00	4,186 90	1,813 10
General	88,666 55	78,225 93	10,440 62
Totals.....	\$453,086 42	\$407,860 44	\$45,225 98

Sewer Division Specials.

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended from Feb. 1, 1898, to Jan. 31, 1899.	Balances on hand Jan. 31, 1899.
Back Bay Fens Sewage.....	\$25,000 00	\$25,000 00	.....
Dam from Maverick street to Prescott street, East Boston.....	3,000 00	.....	\$3,000 00
Sewerage Works.....	1,535,170 00	1,490,743 50	44,426 50
Stony Brook Improvement.....	141,108 10	94,434 76	46,673 34
Totals	\$1,704,278 10	\$1,610,178 26	\$94,099 84

Laying-out and Construction of Highways.*Expenditures.*

Sewer construction	\$21 97
Street construction	434,350 77
Total	<u>\$434,372 74</u>

Blue Hill and Other Avenues.*Expenditures.*

OBJECT OF APPROPRIATION.	Street Construction.	Sewer Construction.	Totals.
Blue Hill avenue.....	\$6,629 95	.....	\$6,629 95
Columbus avenue.....	163,601 74	.....	163,601 74
Commonwealth avenue extension.....	1,113 30	\$15 00	1,128 30
Commonwealth avenue construction...	84,177 30	.....	84,177 30
Totals	\$255,522 29	\$15 00	\$255,537 29

South Union Station.*Expenditures.*

Sewer construction	\$41,588 39
Street construction	78,676 17
Totals	<u>\$120,264 56</u>

Recapitulation of Expenditures for the Twelve Months Ending January 31, 1899.

OBJECT OF APPROPRIATION.	Current Expenses for the twelve months ending Jan. 31, 1899.	Special Appropriations.	Totals.
Street Department:			
Central Office	\$19,186 24		\$19,186 24
Bridge Division	129,253 03	\$45,334 06	174,587 09
Boston and Cambridge Bridges ...	13,569 89		13,569 89
Ferry Division	213,055 79	131,736 40	344,792 19
Paving Division	726,255 20	81,669 72	807,924 92
Sanitary Division	508,152 88		508,152 88
Sewer Division	337,376 27	1,610,178 26	1,947,554 53
Street Cleaning Division	316,052 73		316,052 73
Street Watering Division	138,728 57		138,728 57
Street Improvements		407,860 44	407,860 44
Laying-out and Construction of Highways		434,372 74	434,372 74
Blue Hill and Other Avenues		255,537 29	255,537 29
South Union Station		120,264 56	120,264 56
Totals	\$2,401,630 60	\$3,086,353 47	\$5,488,584 07

**Street Building Under Chapter 323 of the Acts of 1891, or
Special Acts or Amendments Thereto.**

STREET.	Paving.	STREET.	Paving.
Amory st.....	\$28 50	Malvern st.....	\$4,246 04
Angell st.....	52 63	Maryland st.....	1,245 38
Ashley st.....	12 50	Mellen st.....	5,224 61
Astor st.....	39 99	Merlin st.....	1,760 83
Athelwold st.....	185 17	Middleton st.....	43 00
Belmore terrace.....	3,828 12	Millet st.....	25 60
Belvidere st.....	293 00	Morse st.....	98 32
Bernard st.....	9,789 47	Newburg st.....	18 00
Bloomfield st.....	87 85	Nightingale st.....	9,074 52
Burt st.....	5,748 90	North Harvard st.....	23,867 95
Callender st.....	11 00	Norway st.....	166 35
Canal st.....	16,499 32	Oakley st.....	6,608 33
Carlos st.....	2,144 47	Peterborough st.....	29 40
Chamberlain st.....	69 86	Peverell st.....	2,540 11
Chamblat st.....	2,563 54	Queensberry st.....	13,028 65
Charlestown st.....	4 50	Rosseter st.....	7,176 50
Chiswick road.....	45 00	Ruggles st.....	9,612 42
Columbia road.....	167,992 11	School st.....	125 00
Commonwealth ave.....	31 22	Shirley st.....	14 50
Devon st.....	19 75	Spencer st.....	726 56
Elizabeth st.....	2,144 51	Stanley st.....	7 62
Ellet st.....	56 96	St. Stephen st.....	2,676 13
Engineering expense.....	1,077 45	Stuart st.....	1,724 40
Fairmount st.....	16,776 03	Telford st.....	1,759 51
Fenelon st.....	120 86	Thane st.....	7 88
Forest Hills st.....	43 37	Tonawanda st.....	11,867 51
Fowler st.....	43 45	Turner st.....	185 71
Francis st.....	52 86	Vancouver st.....	2,465 64
Fullerton st.....	116 69	Van Winkle st.....	19 65
Gaylord st.....	47 10	Waterlow st.....	3,477 32
Geneva ave.....	329 81	Wensley st.....	57 75
Greenbrier st.....	139 83	West Selden st.....	531 96
Hamilton st.....	2,380 16	Wolcott st.....	163 62
Harold st.....	423 86	Woodlawn st.....	15 38
Hewins st.....	3,848 47	Public alley No. 401.....	188 27
Idaho st.....	31 50	402.....	117 27
Ipswich st.....	45,467 26	403.....	47 40
Jersey st.....	19,732 17	404.....	1,064 76
Leeds st.....	43 40	437.....	1,787 90
Leedsville st.....	4,367 27	701.....	43 94
Leroy st.....	4,966 85		
Lonsdale st.....	8,992 82		
		Total.....	\$434,350 77

**List of Contracts from February 1, 1898, to January 31, 1899,
made by the Street Department.**

Paving-Blocks.

CONTRACT.	Awarded to	Dated	Price per M. deliv- ered on wharves.
Large Paving-blocks, 748,000....	Rockport Granite Co...	Feb. 25, 1898....	\$48 30
Gutter Paving-blocks, 179,000...	Rockport Granite Co...	July 19, 1898....	40 00
Gutter Paving-blocks, 100,000...	Rockport Granite Co...	July 19, 1898....	41 00
Philadelphia Paving-blocks, 538,000.....	Rockport Granite Co...	Feb. 25, 1898....	48 30
(2 Contracts)	Rockport Granite Co...	July 23, 1898....	
Large Paving-blocks, 407,000 ...	Pigeon Hill Granite Co.	March 12, 1898..	48 30
Philadelphia Paving-blocks, 207,000.....	Pigeon Hill Granite Co.	March 13, 1898..	48 30
Large Paving-blocks, 211,000 ...	Cape Ann Granite Co..	July 13, 1898....	48 30
Philadelphia Paving-blocks, 200,000.....	Cape Ann Granite Co..	July 13, 1898....	48 30
Gutter Paving-blocks, 47,000....	Cape Ann Granite Co..	July 13, 1898....	48 30
Large Paving-blocks, 71,000	A. Ford & Son.	Feb. 17, 1898....	44 30
Philadelphia Paving-blocks, 82,000.....	J. Grant & Co.....	Feb. 17, 1898....	44 50

Bank Gravel and Sand.

DISTRICT.	Awarded to	Dated	PRICE.			
			Gravel.		Sand.	
			A.	B.	A.	B.
South Boston.....	F. J. Hannon..	May 9, 1898....	\$1 50	\$0 75	\$1 50	\$0 75
East Boston.....	L. F. Leary....	May 9, 1898.	1 33	0 69	1 33	0 69
Charlestown.....	P. O'Riorden..	May 9, 1898.	1 50	0 63	1 20	0 60
Brighton.....	Neill McBride..	May 10, 1898....	1 46	0 73	1 46	0 73
West Roxbury....	J. A. Whitte- more's Sons..	May 11, 1898....	1 08	0 54	0 98	0 49
Dorchester.....	F. McGovern..	May 9, 1898.	1 24	0 55	1 45	0 73
Roxbury.....	H. P. Nawn....	May 9, 1898.	1 59	0 50	1 70	0 60
City Proper, Dis- tricts 8 and 9....	Wm. Gilligan ..	May 9, 1898.	1 65	0 80	1 65	0 80
City Proper, Dis- trict 10.....	P. O'Riorden ..	May 9, 1898.	1 30	0 62	1 30	0 62

EXPLANATION OF LETTERS: A, double loads; B, single loads.

Spruce Lumber.

DISTRICT.	Awarded to	Dated	Price per M. ft. B. M.	Price for planing per M. ft.
South Boston.....	Curtis & Pope Lumber Co.,	Jan. 29, 1898..	\$13 94	\$0 95
East Boston.....	Curtis & Pope Lumber Co.,	Jan. 29, 1898..	15 44	0 95
Charlestown.....	G. Fuller & Son.....	Jan. 29, 1898..	15 25	0 95
Brighton.....	G. Fuller & Son.....	Jan. 29, 1898..	14 44	0 95
West Roxbury...	G. Fuller & Son.....	Jan. 29, 1898..	15 44	0 95
Dorchester.....	G. Fuller & Son.....	Jan. 29, 1898..	13 94	0 95
Roxbury.....	G. Fuller & Son.....	Jan. 29, 1898..	13 94	0 95
City Proper.....	G. Fuller & Son.....	Jan. 29, 1898..	13 94	0 95

Beach Gravel.

DISTRICT.	Awarded to	Dated	Price per ton deliv- ered on wharves.
City Wharves.....	T. Cargill, Jr.....	March 12, 1898..	\$0 59½

Iron Castings.

CONTRACT.	Awarded to	Dated	Price per 100 lbs.
Iron Castings.....	Sessions Foundry Co..	Feb. 14, 1898....	\$1 13½

Coal.

CONTRACT.	Awarded to	Dated	Price per ton 2,240 lbs.
1,500 tons, Pumping Station, Dorchester.....	Garfield & Proctor Coal Co.....	Feb. 24, 1898....	\$2 70
1,500 tons, Pumping Station, Dorchester.....	John Morrison.....	May 6, 1898....	3 03
1,500 tons, Pumping Station, Dorchester.....	Metropolitan Coal Co.....	Dec. 29, 1898....	3 23
1,500 tons, Ferry Wharves.....	John Morrison.....	May 6, 1898....	3 03
7,000 tons, Ferry Wharves.....	Metropolitan Coal Co.....	July 30, 1898....	2 49

Crosswalk Flagging.

CONTRACT.	Awarded to	Dated	PRICE PER SQUARE FT.	
			On Wharves.	On Streets.
Granite.....	Rockport Granite Co..	Feb. 25, 1898....	\$0 30	
North River....	J. J. Cuddihy.....	July 26, 1898....	0 33	\$0 36½

Lease of Ledge Lots, Quarrying Stone, etc.

CONTRACT.	Lessor.	Dated	Price.
Lease of ledge lot, Roseter st. ¹	W. T. Emerson.....	April 1, 1898.....	\$0.25 per ton.
Lease of ledge lot, Centre st., between Allandale and Walter sts. ²	Thomas Minton.....	January 2, 1899.....	\$0.18 per ton.
Lease of ledge lot, Heath st., near Day st.	Frederick Bleier.....	April 1, 1898.....	\$0.20 per ton.
Quarrying and cutting stone from ledge on Washington st., near Townsend, and delivering the same at Dimock st. crusher.....	H. P. Nawn.....	April 16, 1898.....	\$0.97½ per ton.
Quarrying and cutting stone from west side of Commonwealth ave., between Washington st. and Howard pl. and delivering same as ordered.....	Michael Kiernan.....	August 9, 1898.....	(A) \$1.35 per cubic yard. (B) \$1.60 per cubic yard. (C) \$1.90 per cubic yard. (D) \$0.15 per cubic yard.
Quarrying and cutting stone from Commonwealth ave., between Washington and Warren sts. and delivering the same as ordered.....	A. McMurtry & Sons.....	October 10, 1898.....	(A) \$1.27 per cubic yard. (B) \$1.60 per cubic yard. (C) \$1.90 per cubic yard. (D) \$0.15 per cubic yard.
Quarrying and cutting stone from east side of Commonwealth ave., between Washington st. and Howard pl. and delivering the same as ordered.....	M. Kiernan.....	January 4, 1899.....	(A) \$1.35 per cubic yard. (B) \$1.60 per cubic yard. (C) \$1.90 per cubic yard. (D) \$0.15 per cubic yard.

EXPLANATION OF LETTERS.

¹ Expires February 1, 1902. ² Expires February 1, 1903.

(A) Delivered at the foot of the ledge. (B) Delivered on the platform of the Commonwealth ave. Crusher or within one-half mile haul of the ledge. (C) Delivered on North Harvard st. (D) For all stone loaded into city teams.

Lease of Land, etc.

CONTRACT.	Lessor.	Dated	Price.
Lease of wharf, 466 to 470 Atlantic av.....	J. H. Hecht	February 19, 1898.....	First five years, \$10,000 per year; last five years \$11,500 per year. Taxes and water rates and interest at six per cent. per annum on all amounts paid by the Lessor for public assessments or betterments laid upon these premises after March 1, 1898.
Lease of wharf, etc., Revere st.....	J. J. Costello.....	December 29, 1898.....	\$5,500 per year and taxes.
Lease of certain privileges at Harvard-st. bridge.....	N. Y., N.H. & H. R.R. Co.....	January 19, 1899.....	\$1 per year.

Collecting and Removing Ashes.

CONTRACTOR.	Lessor.	Dated	Price.
Collecting and removing ashes, etc., Meeting House Hill District	P. J. Lyons.....	March 26, 1898.....	\$3,645 per year for two years.

Collecting and Removing House Offal.

CONTRACTOR.	Lessor.	Dated	Price.
Collecting and removing house offal, etc., West Roxbury District	Geo. T. Barnes	March 23, 1898.....	\$1,800 per year for three years.
Collecting and removing house offal, etc., Brighton District,	Geo. T. Barnes	May 4, 1898.....	\$3,000 per year for three years.

Furnishing Filling.

CONTRACT.	Awarded to	Dated	Price.
1,450 cubic yards on Columbia road.....	R. J. Johnson.....	April 13, 1898.....	(A) \$0.50
6,500 cubic yards on St. Stephen street, from Bryant street about 803 feet northeasterly.....	James T. Gilligan.....	April 28, 1898.....	(B) \$0.20
6,000 cubic yards on Columbus avenue, opposite Roxbury street.....	James T. Gilligan.....	June 11, 1898.....	(B) \$0.30
2,000 cubic yards on Columbus avenue near Ritchie street..	J. P. Niland.....	June 14, 1898.....	(B) \$0.30
45,000 cubic yards on Jersey street between Audubon road and Peterborough street.....	Boston and Albany Railroad Co.	August 24, 1898.....	(A) \$0.51
30,000 cubic yards on Columbia road between Mercer and Mt. Vernon streets.....	John S. Jacobs & Son.....	October 20, 1898.....	(A) \$0.35
4,500 cubic yards on Columbia road near Allbright street..	J. McGovern... ..	December 17, 1898.....	(B) \$0.59½
8,000 cubic yards on Columbia road between Mt. Vernon and Mercer streets.....	J. J. Sullivan.....	December 24, 1898.....	(A) \$0.60
2,000 cubic yards on Belvidere street in the old location of the B. & A. R.R. Co.....	William Gilligan.....	January 25, 1899.....	(B) \$0.40
Grading Columbia road between I street and the west line of Atlantic street.....	Simon J. Donovan.....	October 25, 1898.....	(B) \$0.46½
Building culvert and grading Columbia road between Mercer and Mt. Vernon streets.....	Simon J. Donovan.....	December 28, 1898.....	(C) \$2,386.24 (B) \$0.69½

(A) Per cubic yard Bank measurement. (B) Per cubic yard measured in the fill. (C) Culvert (wooden).

Paving and Regulating.

CONTRACT.	Awarded to	Dated	Price.
Summer st. and Dorchester ave.....	H. P. Nawn.....	March 25, 1898.....	\$3.00 each single team and driver; \$5.00 each double team and driver; labor and materials cost plus 15 %.
Bunker Hill st., between Chelsea and Elm sts.....	J. Turner & Co.....	May 4, 1898.....	(B) \$0.08; (D) \$0.25; (F) \$0.18.
Hull st., between Salem and Commercial sts.....	P. H. Bradley & Co.....	May 16, 1898.....	(B) \$0.08; (D) \$0.25; (F) \$0.18.
Hanover st., between Washington and Court sts.....	H. Gore & Co.....	June 1, 1898.....	(B) \$0.08; (D) \$0.25; (E) \$0.90; (F) \$0.18.
Brighton st., between Leverett and Lowell sts.....	D. J. Kiley.....	August 1, 1898.....	(B) \$0.08; (D) \$0.25; (E) \$0.90; (F) \$0.18.
Shawmut ave., between Cherry st. and 108 feet north of Cobb st.....	H. Gore & Co.....	August 16, 1898.....	(B) \$0.08; (C) \$5.00; (D) \$0.25; (E) \$0.90; (F) \$0.18.
Tremont st., between Boylston and Pleasant sts., and Shawmut ave., between Tremont and Pleasant sts.....	H. Gore & Co.....	August 22, 1898.....	(B) \$0.08; (D) \$0.25; (E) \$0.90; (F) \$0.18.
Tremont st., between Weston and Hammond sts.....	J. Doherty & Co.....	October 1, 1898.....	(B) \$0.08; (D) \$0.25; (F) \$0.18.
Howard st., between Bulfinch and Court sts.....	H. Gore & Co.....	October 4, 1898.....	(B) \$0.08; (D) \$0.25; (E) \$0.90; (F) \$0.18.
Brattle st., between Washington and Court sts.....	H. Gore & Co.....	October 18, 1898.....	(B) \$0.08; (D) \$0.25; (E) \$0.90; (F) \$0.18.
Commercial st., between State and Clinton sts.....	H. Gore & Co.....	October 24, 1898.....	(B) \$0.08; (D) \$0.25; (E) \$0.90; (F) \$0.18.
Norfolk ave., between Magazine and Shirley sts.....	Barnes, Rufin Co.....	October 28, 1898.....	(A) \$1.20; (B) \$0.08; (D) \$0.25; (G) \$0.12.
Alford st., between Main st. and Malden bridge.....	P. Brennan & Co.....	October 28, 1898.....	(B) \$0.08; (D) \$0.25; (F) \$0.18.

EXPLANATION OF LETTERS.

(A) Excavation (old macadam surface, etc.). (B) Setting edgestones. (C) Furnishing and laying a 6-in. American cement concrete base. (D) Laying granite blocks and flagging crosswalks with gravel joints. (E) Laying granite blocks and flagging crosswalks with pitch joints. (F) Laying brick sidewalks. (G) Laying gravel sidewalks.

Furnishing and Laying a 6-inch American Cement Concrete Base.

CONTRACT.	Awarded to	Dated	Price.
Hanover st., between Washington and Court sts.....	Perrin & Carter.....	June 1, 1898.....	\$5.00 per cubic yard.
Tremont st., between Boylston and Pleasant sts., and Shawmut ave., between Tremont and Pleasant sts.....	Perrin & Carter.....	August 22, 1898.....	\$5.00 per cubic yard.
Commercial st., between State and Clinton sts.....	Perrin & Carter.....	October 22, 1898.....	\$4.75 per cubic yard.
Howard st., between Bulfinch and Court sts.....	Perrin & Carter.....	October 1, 1898.....	\$4.75 per cubic yard.

1 Artificial Stone Sidewalks.

CONTRACTOR.	Dated	Price.	CONTRACTOR.	Dated	Price.
Aberthaw Construction Company.....	April 14, 1898..	6 cts. per square foot.	Robert A. Moore.....	Sept. 19, 1898..	6 cts. per square foot.
Barnes, Rutlin Company.....	May 17, 1898..	6 cts. per square foot.	W. A. Mutfeldt Company.....	April 14, 1898..	6 cts. per square foot.
Boston Paving Company.....	May 18, 1898..	6 cts. per square foot.	H. P. Nawn.....	June 23, 1898..	6 cts. per square foot.
Thomas J. Hind.....	April 14, 1898..	6 cts. per square foot.	J. C. Newborg.....	April 14, 1898..	6 cts. per square foot.
P. F. Lonergan.....	June 29, 1898..	6 cts. per square foot.	Simpson Bros. Corporation.....	April 14, 1898..	6 cts. per square foot.
John Mahan.....	May 18, 1898..	6 cts. per square foot.	J. Uffell & Co.....	Sept. 29, 1898..	6 cts. per square foot.

¹ These walks are guaranteed by a surety company bond for five (5) years from date of completion, and were laid on various accepted streets where the Contractor had agreements with the abutters.

Paving with Trinidad Asphalt.

CONTRACT.	Awarded to	Dated	Price.
Beacon st., from about 148 ft. east of the easterly line of Gloucester st. to about 78 ft. west of the westerly line of Gloucester st.....	Barber Asphalt Paving Company.....	May 23, 1898.....	(A) \$3.00 per square yard.
Kilby st., from Milk st. to State st.....	Barber Asphalt Paving Company.....	September 7, 1898.....	(B) \$2.00 per square yard. (C) \$5.00 per cubic yard. (D) \$12.00 per cubic yard.
Parkman st., from North Anderson st. across Blossom st.....	Barber Asphalt Paving Company.....	September 28, 1898.....	(E) \$2.75 per square yard.
Paving with Trinidad asphalt and regulating Public Alley 437, between Beacon and Marlborough sts., from Arlington st. to Berkeley st.....	Barber Asphalt Paving Company.....	November 10, 1898.....	(F) \$2,063.89.

Paving with Sicilian Rock Asphalt.

Shawmut ave., from Cherry st. to a point about 108 ft. north of Cobb st.....	Boston Asphalt Company.....	August 16, 1898.....	(G) \$3.00 per square yard. (H) \$2.25 per square yard.
West Broadway, from a point 263 ft. east of the easterly line of F st. to a point about 350 ft. easterly.....	Boston Asphalt Company.....	October 2, 1898.....	\$3.00 per square yard.

Paving with Asphaltina.

Hayward pl., between Washington st. and Harrison ave.....	Boston Paving Company.....	October 28, 1898.....	(I) \$3.00 per square yard.
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EXPLANATION OF LETTERS.

(A) Furnishing and laying a 6-in. American cement concrete base, a 2-in. wearing surface and 1½-in. binder on existing concrete base. (C) Extra binder furnished and laid. (D) Extra binder furnished and laid. (E) Furnishing and laying a 6-in. American cement concrete base and 1½-in. wearing surface and binder. (F) Furnishing and laying a 6-in. American cement concrete base and 1½-in. wearing surface and binder, including all excavation and regulating edgestones and sidewalks and guaranteeing the pavement for a period of ten (10) years after completion. (G) Furnishing and laying a 6-in. American cement concrete base and a 2½-in. wearing surface. (H) Furnishing and laying a 2½-in. wearing surface on existing concrete base. (I) Furnishing and laying a 6-in. American cement concrete base and a 2½-in. wearing surface, including all excavation and regulating edgestones and sidewalks.

Sewer Construction under Chapter 426 of the Acts of 1897, and Amendment.

CONTRACT.	Awarded to	Dated	Cost of contract, as per estimated quantities, not including materials.
Sewer in Chiswick road, between Strathmore and Selkirk roads.....	T. J. Young & Co.....	February 19, 1898.....	\$1,031 25
Sewer in Selkirk road, between Chiswick and Sutherland roads.....	T. J. Young & Co.....	March 24, 1898.....	518 75
Sewers and drains in Summer-st. extension, between E st. and L-st. bridge.....	J. P. O'Connell.....	April 14, 1898.....	1,537 75
Sewer in Kilsyth road, from Colliston road northerly.....	T. J. Young & Co.....	April 23, 1898.....	146 25
Sewers and drains in Peverell st., between Sawyer ave. and Salcombe st.....	Flynn & Brophy.....	April 25, 1898.....	746 55
Sewers and drains in Fairmount st., between Capen and Morton sts.....	James McGraw & Co.....	April 27, 1898.....	223 30
Drains, Telford st., between Western ave. and Charles river reservation.....	T. J. Young & Co.....	May 2, 1898.....	288 50
Sewers and drains, Harold st., between Walnut ave. and Monroe st.....	H. P. Nawn.....	May 3, 1898.....	1,485 00
Sewers in Allston st., between Commonwealth ave. and Warren st.....	T. J. Young & Co.....	May 6, 1898.....	482 50
Sewers and drains in Carlos st., between Chapman and Lauriat aves.....	Flynn & Brophy.....	May 10, 1898.....	663 10
Sewers and drains in Lonsdale st., between Adams st. and Dorchester ave.....	Flynn & Brophy.....	May 12, 1898.....	516 94
Sewer work in Astor st.....	J. P. O'Connell.....	May 10, 1898.....	3,767 57
Drains in Bernard st.....	James Dolan.....	May 14, 1898.....	67 50

Sewer Construction under Chapter 426 of the Acts of 1897, and Amendment. — *Continued.*

CONTRACT.	Awarded to	Dated	Cost of contract, as per estimated quantities, not including materials.
Sewers and drains in Sonoma st., between Maple st. and Elm Hill ave.....	James Dolan.....	May 14, 1898.....	\$727 31
Drains in Woodlawn st., between Hyde Park ave. and Forest Hills Cemetery.....	Thomas Minton.....	May 16, 1898.....	1,043 55
Sewers and drains in Norfolk st., between Ballou ave. and Mascot st.....	J. McGraw & Co.....	May 16, 1898.....	508 25
Sewers in Kilsyth road, between Lanark and Selkirk roads.	T. J. Young & Co.....	May 16, 1898.....	1,870 40
Sewers in Selkirk road, between Kilsyth and Sutherland roads.....	T. J. Young & Co.....	May 16, 1898.....	1,856 50
Sewers and drains, Torrey and Wentworth sts.....	Frank A. Foster.....	May 25, 1898.....	1,821 75
Sewers and drains in Chiswick road and outlets, Brighton..	P. & F. E. McCarthy.....	May 26, 1898.....	5,687 04
Sewers in Sherwood st., between Garden st. and Ashland st.....	D. M. Dwyer.....	May 26, 1898.....	729 30
Sewers and drains in Waterlow st. and outlet.....	A. E. Stewart.....	June 3, 1898.....	1,055 60
Sewer in Barry st., between Barrington and Quincy sts...	J. H. Brennan.....	June 4, 1898.....	730 00
Sewers and drains in Hamilton st. and outlet.....	D. M. Dwyer.....	June 13, 1898.....	1,432 88
Sewers in Richmond and Butler sts.....	J. McGraw & Co.....	June 18, 1898.....	2,282 92
Sewers and drains in Seaver st., between Humboldt and Elm Hill aves.....	R. L. Barrett.....	June 21, 1898.....	1,690 01
Sewers and drains in Leedsville st.....	J. P. O'Connell.....	June 16, 1898.....	263 50
Sewer in Walnut ave., Roxbury.....	J. P. O'Connell.....	June 16, 1898.....	346 00
Sewers and drains in Mellen st. and outlet.....	J. P. O'Connell.....	June 16, 1898.....	539 70

Drains in Merlin st.....	J. McGraw & Co.....	June 16, 1898.....	55 00
Sewers and drains in West Brookline st., between Washington st. and Shawmut ave.....	J. McGraw & Co.....	June 16, 1898.....	549 75
Sewers and drains in Middleton ave., between Norfolk st. and Willowwood st.....	A. E. Stewart.....	June 23, 1898.....	1,363 00
Sewer in Sedgwick st.....	J. McGraw & Co.....	June 25, 1898.....	247 50
Sewer in Warren st., between Cambridge st. and 250 feet easterly.....	T. J. Young & Co.....	June 30, 1898.....	672 50
Catch-basin drains in Shenandoah and Carruth sts.....	J. P. O'Connell.....	June 27, 1898.....	257 50
Sewers in Mascot st., between Jones and Mountain aves.....	Flynn & Brophy.....	July 1, 1898.....	339 00
Sewer in Evelyn st. and outlet.....	Flynn & Brophy.....	July 5, 1898.....	2,169 20
Sewer in Raven st.....	George Tucker.....	July 8, 1898.....	225 00
Sewers and drains in Spencer st., between Wheatland and Talbot aves.....	James Dolan.....	July 11, 1898.....	521 00
Drains in Astor st., between Massachusetts ave. and Hem-carway st.....	J. P. O'Connell.....	July 11, 1898.....	1,334 82
Sewer work in St. Stephen st.....	D. E. Lynch.....	July 12, 1898.....	3,685 92
Sewer in Lauriat st.....	Flynn & Brophy.....	July 15, 1898.....	289 56
Sewers in Beech Glen st.*.....	George Tucker.....	July 15, 1898.....	399 50
Sewer in Torrey st., Dorchester.....	F. A. Foster.....	July 16, 1898.....	1,152 50
Sewers and drains in West Selden st.....	T. J. Young & Co.....	July 18, 1898.....	6,093 30
Sewer and drains in Blackwell and Bowman sts.....	P. F. Danehy.....	July 18, 1898.....	448 00
Sewer and drains in Maryland st.....	P. F. Danehy.....	July 18, 1898.....	271 25
Sewers and drains in Ipswich st., between Charlesgate West and Boylston road.....	J. P. O'Connell.....	July 21, 1898.....	3,003 54

* Cancelled September 6, 1898.

Sewer Construction under Chapter 426 of the Acts of 1897, and Amendment. — *Continued.*

CONTRACT.	Awarded to	Dated	Cost of contract, as per estimated quantities, not including materials.
Sewers and drains in Francis and Vila sts. and Kenwood road.....	J. McGraw & Co.....	July 21, 1898.....	\$2,903 80
Sewer in Massasoit ave.....	F. A. Foster.....	July 22, 1898.....	1,243 50
Sewer in Prescott st., between Faxon and Harvard sts.....	F. A. Foster.....	July 22, 1898.....	1,534 75
Sewer in Bowdoin st., Dorchester.....	T. H. Connolly.....	July 25, 1898.....	1,504 00
Sewers and drains in Rugles and Vancouver sts.....	J. P. O'Connell.....	July 25, 1898.....	625 75
Sewers and drains in Nightingale st., Dorchester.....	Quimby & Ferguson.....	July 28, 1898.....	841 55
Sewer in Westbourne st.....	James Dolan.....	July 30, 1898.....	335 50
Sewer in Dorchester ave., South Boston.....	McDowell & Sons.....	August 1, 1898.....	890 50
Sewer in Ferndale st., Dorchester.....	D. E. Lynch.....	August 4, 1898.....	116 50
Sewer in Nottingham st.....	D. E. Lynch.....	August 4, 1898.....	185 30
Sewer in Roland park, Dorchester.....	J. P. O'Connell.....	August 4, 1898.....	167 00
Sewer in Melbourne st., between Joseph and Centre sts.....	D. E. Lynch.....	August 4, 1898.....	470 75
Sewer in Lanark road, between Sutherland and Kinross roads.....	T. J. Young & Co.....	August 4, 1898.....	1,083 75
Sewer in Whitfield st., Dorchester.....	D. E. Lynch.....	August 4, 1898.....	198 20
Sewers and drains in Waumbec st.....	D. M. Dwyer.....	August 9, 1898.....	485 22
Sewers and drains in Wensley st., between Heath and Bickford ave.*.....	George Tucker.....	August 9, 1898.....	828 25
Sewers and drains in Stanley st.....	D. M. Dwyer.....	August 9, 1898.....	308 50

Drains in Thane st.....	J. P. O'Connell.....	August 9, 1898.....	245 20
Sewer in Peter st., South Boston.....	Flynn & Brophy.....	August 11, 1898.....	201 50
Drains in Gawain st., Dorchester.....	Flynn & Brophy.....	August 9, 1898.....	325 00
Sewer in Lanark road, between Englewood ave. and Kil-syth road.....	T. J. Young & Co.....	August 11, 1898.....	650 00
Sewers in Eaton sq., Dorchester.....	D. M. Dwyer.....	August 11, 1898.....	693 00
Conduit for Tenen brook, between 100 feet south of the Shawmut Branch R.R. to Charles st.; thence to Geneva ave.....	H. P. Nawn.....	August 15, 1898.....	12,000 00
Surface drain for Mattapan brook in Selden st., passageway and Capen st.....	T. H. Connolly.....	August 22, 1898.....	8,531 62
Sewer in Smith st., between Phillips and St. Alphonsus sts.	T. H. Connolly.....	August 22, 1898.....	707 75
Sewers in Norfolk st., West Roxbury.....	T. H. Connolly.....	August 22, 1898.....	1,847 00
Sewer in Harrison st., West Roxbury.....	McDowell & Sons.....	August 22, 1898.....	359 25
Sewers and drains in Columbia road, section 3.....	J. C. Coleman & Son.....	August 23, 1898.....	12,592 50
Sewers, culvert and drains in Idaho st. and outlet.....	D. E. Lynch.....	August 23, 1898.....	2,783 15
Sewers in Kinross road between Sutherland road and Commonwealth ave.....	T. J. Young & Co.....	August 25, 1898.....	1,607 50
Drains in Peterborough st., between Audubon road and Audubon road.....	Quimby & Ferguson.....	August 26, 1898.....	2,250 36
Sewers and drains in Temple and Perham sts., and outlets...	T. H. and G. M. Byrne.....	August 27, 1898.....	14,780 00
Sewers and drains in Newburg st.....	James Delan.....	August 31, 1898.....	2,919 05
Drains in North Harvard st., Brighton.....	T. J. Young & Co.....	September 5, 1898.....	3,202 50
Sewer in Ditson st.....	D. E. Lynch.....	September 6, 1898.....	149 68

* Cancelled September 6, 1898.

Sewer Construction under Chapter 426 of the Acts of 1897, and Amendment. — *Continued.*

CONTRACT.	Awarded to	Dated	Cost of contract, as per estimated quantities, not including materials.
Sewers in Park st., between Centre and Montview sts.....	McDowell & Sons.....	September 7, 1898.....	\$1,394 50
Sewers in Newark st., Roxbury.....	James Dolan.....	September 10, 1898.....	1,491 75
Drains in Columbus ave., section 7.....	T. J. Young & Co.....	September 12, 1898.....	1,575 40
Completing sewer in Beech Glen st., originally awarded to George Tucker.....	J. P. O'Connell.....	September 13, 1898.....	2,300 00
Sewer in Bray st., Roxbury..	J. P. O'Connell.....	September 19, 1898.....	177 00
Sewers and drains in Oakridge st., and outlet.....	D. M. Dwyer.....	September 29, 1898.....	1,446 30
Sewer in Bullock st., South Boston.....	J. P. O'Connell.....	September 19, 1898.....	555 60
Sewers in the Parkway for outlet for Francis and Vila sts., and Kenwood road.....	J. McGraw & Co.	September 20, 1898.....	3,100 00
Sewers in Argyle and Marmion sts., and private land between Brookside ave., and Argyle st.....	Thomas F. Minton.....	September 20, 1898.....	919 00
Sewers in Kenwood road.....	J. McGraw & Co.....	September 20, 1898.....	758 70
Completing sewer in Wensley st., between Heath and Bucknam sts., originally awarded to George Tucker.....	T. J. Young & Co.....	September 22, 1898.....	1,300 00
Sewer in Highland st., Roxbury.....	James Dolan.....	September 24, 1898.....	178 00
Sewers in Dorchester ave., City Proper.....	R. J. Malone.....	September 24, 1898.....	2,611 45
Sewers and drains in Sarin Hill ave., between Wesley ave. and Evandale terrace.....	McDowell & Sons.....	September 30, 1898.....	4,502 25
Drains in Bragdon st.....	McDowell & Sons	September 30, 1898.....	438 85
Sewer in Charlestown st., between Haymarket sq. and Causeway st.....	R. J. Malone.....	September 30, 1898.....	3,211 00

Sewers and drains in Malvern st., between existing sewer and Milton st.	James Dolan.....	October 1, 1898.	458 95
Drains in Ipswich st., between Boylston st. and Charlesgate West.	J. P. O'Connell.....	October 3, 1898.	3,743 40
Sewer in Centre st., between Dorchester ave. and Remington st.	F. A. Foster.....	October 6, 1898.	1,621 00
Sewers and drains in Richmond and Adams sts., and outlet, Sewers and drains in Public Alleys 401 to 405 inclusive, between Huntington ave. and St. Botolph st., from Irvington st. to alley northeast of Massachusetts ave.	P. & F. E. McCarthy	October 8, 1898.	9,722 26
Drains on Orkney road.....	J. P. O'Connell.....	October 13, 1898.	1,252 50
Drains in Amory st.	T. J. Young & Co.....	October 20, 1898.	765 75
Conduit for Tenean brook from a point 100 feet south of the Shawmut Branch R.R. to Park st.	Patrick McCarthy.....	October 20, 1898.	609 50
Sewers and drains in Shirley st.	H. P. Nawn.....	October 21, 1898.	10,860 00
Drains in St. Stephen st.	Quimby & Ferguson.....	October 22, 1898.	1,188 64
Sewer and drains in Stanwood st.	D. E. Lynch.....	October 22, 1898.	1,285 00
Drains in Fowler st.	D. E. Lynch.....	October 26, 1898.	388 90
Drains in Angell st.	J. P. O'Connell.....	October 27, 1898.	1,146 25
Surface drain for Mattapan brook, in Selden st., passage-way and Capen st., originally awarded to T. H. Connolly, Sewers and drains in Belvidere st., between Dalton and West Newton sts.	D. E. Lynch.....	October 28, 1898.	1,169 75
Sewer in Leicester st., between Bennett and Surrey sts.	J. P. O'Connell.....	October 29, 1898.	9,450 00
Conduit in Callender st., between Don and Lyons sts.	McDowell & Sons.....	November 1, 1898.	670 55
Sewers and drains in private land and Endleigh st., Dorchester.....	T. J. Young & Co.....	November 2, 1898.	1,038 75
	R. J. Malone.....	November 5, 1898.	16,394 50
	P. McCarthy.....	November 8, 1898.	3,816 14

Sewer Construction under Chapter 426 of the Acts of 1897, and Amendment. — Concluded.

CONTRACT.	Awarded to	Dated	Cost of contract, as per estimated quantities, not including materials.
Sewer in Saratoga street, East Boston.....	Ward & Coulin	November 10, 1898.....	\$432 50
Sewer in Centre street, between Remington street and Centre avenue.....	F. A. Foster.....	November 14, 1898. . . .	348 00
Sewers and drains in Wachusett street, between Walk Hill and Varney streets.....	J. P. O'Connell	November 14, 1898.....	827 00
Sewer and drains in Hopkins street, Dorchester.....	D. M. Dwyer	November 18, 1898.....	2,400 00
Sewers and drains in Centre street, between Elm lawn and 300 feet easterly.....	F. A. Foster.....	November 28, 1898.....	788 50
Sewers and drains in Walk Hill street, between Blue Hill avenue and 300 feet north of Tlleston avenue.....	James Dolan.....	December 1, 1898.....	1,456 00
Sewer in private way off Romsey street, Dorchester.....	John Mc-Morrow	December 1, 1898.....	161 00
Sewers and drains in Devon street.....	J. C. Coleman & Son.....	December 3, 1898.....	2,673 20
Sewers and drains in Columbia road, Sect. 2.....	H. P. Nawn	December 6, 1898.....	2,157 50
Sewers in Sparhawk street, Brighton.....	T. J. Young & Co.....	December 8, 1898.....	324 80
Sewers in Faxon street and Harvard avenue, Dorchester..	J. P. O'Connell	December 16, 1898.....	1,078 75
Sewers and drains in Hinton street, between Butler and Medway streets.....	James McLaughlin & Son.....	December 19, 1898.....	1,129 01
Sewer in Harriet street and outlet, Brighton.....	T. J. Young & Co.....	December 20, 1898.....	3,189 75
Conduit for Oakland Garden Fork, Canterbury branch of Stony brook	H. P. Nawn.....	December 8, 1898.....	2,570 00
Rock excavation for sewer, Columbia road, Sect. 1.....	H. P. Nawn.....	April 21, 1898.....	2 90 per cubic yard.
Rock excavation for sewer, Columbia road, Sect. 2.....	H. P. Nawn.....	June 20, 1898.....	2 90 per cubic yard.

Street Construction under Chapter 323 of the Acts of 1891, or Special Acts or Amendments thereto.

Macadam Roads.

CONTRACT.	Awarded to	Dated	Cost of contract as per estimated quantities, not including materials.
Chamblert st., between Magnolia and Hartford sts.....	John Connors.....	April 14, 1898.....	\$1,165 45
Belmore ter., between Boylston st. and Boylston ter.....	P. O'Hara & Co.....	April 14, 1898.....	1,116 30
Leroy st., between Geneva ave. and Ditson st.....	P. Doherty.....	June 1, 1898.....	910 10
Rosseter st., between Bullard st. and Bowdoin ave.....	P. O'Hara & Co.....	June 1, 1898.....	1,864 10
Elizabeth st., between Norfolk and Astoria sts.....	Collins & Ham.....	June 24, 1898.....	610 06
Leedsville st., between Dorchester ave. and Adams st.....	Collins & Ham.....	June 24, 1898.....	1,200 66
Lonsdale st., between Dorchester ave. and Adams st.....	P. O'Hara & Co.....	June 27, 1898.....	2,505 30
Carlos st., between Lauriat ave. and Chapman ave.....	P. O'Hara & Co.....	June 27, 1898.....	586 50
Oakley st., between Bowdoin st. and Geneva ave.....	John Connors.....	June 30, 1898.....	1,263 40
Malvern st., between Brighton ave. and Ashford st.....	J. Doherty & Co.....	June 30, 1898.....	1,373 30
Burt st., between Washington and Ashmont sts.....	Collins & Ham.....	August 4, 1898.....	2,617 80
Peverell st., between Sawyer ave. and Salcombe st.....	Collins & Ham.....	August 4, 1898.....	1,512 40
Nightingale st., between Talbot ave. and Bernard st.....	J. Doherty & Co.....	August 4, 1898.....	2,504 60
Telford st., between Western ave., and Charles river reser- vation.....	J. Doherty & Co.....	August 4, 1898.....	593 40
Merlin st., between Athelwold and Park sts.....	Patrick McGovern.....	September 7, 1898.....	1,597 10
Mellen st., between Ocean and Montague sts.....	Collins & Ham.....	September 7, 1898.....	1,544 01
Hewins st., between Columbia road and Erie st.....	P. Doherty.....	September 7, 1898.....	1,134 70
Waterlow st., between Harvard and Harvard st.....	J. Doherty & Co.....	September 24, 1898.....	941 40
Hamilton st., between Bowdoin st. and Homes ave.....	James McGovern.....	September 24, 1898.....	1,505 70
Maryland st., between Savin Hill ave. and Bay st.....	P. Doherty.....	September 24, 1898.....	707 30

Street Construction under Chapter 323 of the Acts of 1891, or Special Acts or Amendments thereto.

Macadam Roads. — *Concluded.*

CONTRACT.	Awarded to	Dated	Cost of contract as per estimated quantities, not including materials.
Spencer st., between Wheatland and Talbot aves.	James McGovern.....	September 24, 1898.....	\$882 70
Stuart st., between Dartmouth st. and Trinity pl.	Collins & Ham.....	September 29, 1898.....	643 26
Completing Lonsdale st., original contract awarded to P. O'Hara & Co.....	Barnes, Ruffin Co.....	October 3, 1898.....	
Fowler st., between Greenwood and Glenway sts.....	Collins & Ham.....	November 2, 1898.....	1,345 41
Wensley st., between Heath st., about 720 ft. easterly ..	Collins & Ham.....	November 2, 1898.....	2,193 41
Angell st., between Blue Hill ave. and Canterbury st.	J. Doherty & Co.....	November 2, 1898.....	1,497 60
Harold st., between Munroe st. and Walnut ave.....	P. McGovern.....	November 5, 1898.....	1,408 41
Astor st., between Massachusetts ave. and Parker st.	P. McGovern.....	November 5, 1898.....	1,723 31
Francis st., between Huntington and Brookline aves.....	J. Doherty & Co.....	November 5, 1898.....	3,432 40
Middleton st., between Norfolk st. and 600 ft. northerly ..	P. Doherty.....	November 14, 1898.....	1,175 40
Hamilton st., between Stonehurst and Bowdoin sts., sub- grading.....	D. M. Dwyer.....	August 8, 1898..... }	0.30 per cubic yard earth excavation, 2.00 per cubic yard rock excavation.

Telford Macadam Roads.

Columbia road, from a point 220 ft. north of Glendale st. to the southerly line of Hancock st., and from Dudley st. to Edward Everett sq.....	James McGraw & Co.....	August 15, 1898.....	\$14,510 00
Columbus ave., between Centre st. and a point 100 ft. north of Ritchie st.....	D. E. Lynch.....	September 27, 1898.....	1,727 70
North Harvard st., between Western ave. and Charles river..	G. H. Wentworth & Co.....	September 30, 1898.....	7,240 00

Paving and Regulating.

CONTRACT.	Awarded to	Dated	Cost of contract as per estimated quantities, not including materials.
Columbus ave., between Hanley sq. and New Heath st.....	Jones & Meehan.....	May 10, 1898.....	\$25,668 30
Columbus ave., between New Heath and Heath sts.....	Jones & Meehan.....	July 5, 1898.....	7,845 70
Canal st., between Haymarket sq. and Causeway st.....	Jones & Meehan.....	October 6, 1898.....	12,105 00

Building Ferry-boats, Ferry-drops, Tanks, etc.

CONTRACT.	Awarded to	Dated	Price.
Plans specifications and superintendence of double-screw ferry-boat No. 3.....	R. F. Keough.....	May 2, 1898.....	3 per cent. of the total cost.
Building two ferry tanks.....	J. M. Brooks.....	September 3, 1898.....	\$1,875 00 each.
Building ferry-drop at South Ferry, East Boston side.....	J. M. Brooks.....	September 3, 1898.....	5,775 00
Building ferry-drop at North Ferry, Boston side.....	J. M. Brooks.....	September 3, 1898.....	5,775 00
Building double-screw ferry-boat No. 3.....	Wm. McKie.....	September 2, 1898.....	66,000 00
Building steam pumps for double-screw ferry-boat No. 3.....	Deane Steam Pump Company...	October 26, 1898.....	1,357 00
Wiring and installing the electric light plan in double-screw ferry-boat No. 3.....	Public Buildings Department, Electrical Construction Division	October 5, 1898.....	3,470 80
Two safety valves for double-screw ferry-boat No. 3.....	Crosby Steam Gauge and Valve Company.....	October 22, 1898.....	135 00

Repairs on Engines, etc., at the Pumping Station, Calf Pasture, Dorchester.

CONTRACT.	Awarded to	Dated	Price.
Repairs on valves and seats of Worthington pump.....	The Atlantic Works.....	March 11, 1898.....	\$16,500 and \$7.50 for each new cop- per stud fitted.
Furnishing and placing the engine-house floor.....	New Jersey Steel and Iron Com- pany.....	May 2, 1898.....	\$6,484 00
Repairing the two fly-wheel pumping engines, contract E..	The Lockwood Manufacturing Company.....	August 26, 1898.....	
Valves, etc., for the two fly-wheel pumping engines, con- tract F.....	The Lockwood Manufacturing Company.....	November 17, 1898.....	
Feed water heater, meters, etc.....	The Lockwood Manufacturing Company.....	December 23, 1898.....	2,400 00
Furnishing two strainers for pumping station.....	The Geo. F. Blake Manufacur- ing Company.....	January 2, 1899.....	210 00
Furnishing one ten-inch bronze condenser with elbow, T, and relief valve for No. 1 Engine.....	Henry W. Bulkeley.....	December 12, 1898.....	300 00
Furnishing and placing 980 copper studs in the Worthington pumps.....	Coffin Valve Company.....	August 3, 1898.....	498 00
Building twenty special ten-inch check valves of composi- tion and bronze.....	Blanchard Machine Company....	June 22, 1898.....	385 00

Dredging, Building Platforms, etc.

CONTRACT.	Awarded to	Dated	Price.
Dredging Roxbury canal and towing the material to sea...	Perkins & White.....	February 4, 1898.....	\$100 per day, city to furnish tow.
Dredging the Back Bay Fens.....	Perkins, White & Co.....	March 15, 1898.....	\$23,689 01
Removing old sea-wall, dredging dock, building timber bulkhead, etc., at Fort Hill wharf.....	W. H. Ellis & Co.....	June 15, 1898.....	3,376 00

Dredging dock at the Sanitary Division wharf, Albany st.	Eastern Dredging Co.	November 18, 1898.	1,260 00
Building platform over dock at the Sanitary Division Wharf, Albany st.	Thomas E. Ruggles.	November 30, 1898.	5,470 00
Building platform over dock at Fort Hill Wharf.	W. H. Ellis.	September 2, 1898.	2,499 00

Pile Driving.

CONTRACT.	Awarded to	Dated	Price.
Furnishing and driving spruce piles in Ipswich st., between Boylston st. and Charlestown west.	W. S. Rendle.	February 3, 1898.	\$0.10 per lin. ft., pile driven.
Furnishing and driving spruce piles for sewer, in private land, between Selwyn and Walter sts., West Roxbury	J. W. Pickering & Co.	April 7, 1898.	0.11 per lin. ft., pile driven.
Furnishing and driving spruce piles for sewer in Haskins st., Roxbury	A. A. Hersey	May 23, 1898.	0.09½ per lin. ft., pile driven.
Furnishing and driving spruce piles for sewer in Mt. Washington ave.	W. H. Ellis.	February 9, 1898.	0.14 per lin. ft., pile driven.

Garbage and Refuse Waste Disposal Stations.

CONTRACT.	Awarded to	Dated	Price.
Garbage disposal station, Calf Pasture, Dorchester.	New England Sanitary Product Co.	February 8, 1898.	\$47,400 per year for ten years.
Refuse disposal station, Atlantic ave.	City Refuse Utilization Company	September 10, 1898.	\$5,500 per year for ten years.

Abutments, Retaining-walls and Bridge Strengthening.

CONTRACT.	Awarded to	Dated	Price.
Abutments and pier, Columbia road, at Mt. Vernon st.	D. F. O'Connell	October 10, 1898.	\$23,800 00
Constructing a bridge over Brooks st., Brighton, and doing other work incidental thereto.	Boston and Albany Railroad Company	June 16, 1898	\$7,453 and actual cost with interest at 4 per cent. per annum from August 10, 1898.
Rebuilding sidewalk and fence, Canal bridge	W. H. Ellis & Co.	May 12, 1898.	\$2,582 00
Retaining-walls on Rosseter st.	R. L. Barrett.	October 15, 1898.	1,275 00
Concrete and brick arches for the floor of Cottage Farm bridge.	G. W. Judd.	July 18, 1898.	\$875 for brick arches, \$7 per cubic yard for Portland cement concrete.
Building bridge across the Back Bay Fens waterway at Ipswich st.	Holbrook, Cabot & Daly	March 11, 1898.	\$4,500 00
Completing the artificial stone sidewalk and curb on Cottage Farm bridge.	Simpson Bros. Corporation.	August 25, 1898.	\$50 00
Building temporary bridge across Ipswich st.	Holbrook, Cabot & Daly	June 22, 1898	490 00

Sale of Ferry-boats to the United States Government.

NAME OF BOAT.	Date of Selling.	Price.
"Governor Russell"	May 11, 1898.	\$71,000
"East Boston"	June 2, 1898.	57,500

Miscellaneous Agreements.

CONTRACT.	Awarded to	Dated	Price.
Furnishing coping and pier stones for the reservoir extension, Moon Island	Cape Ann Granite Company....	February 14, 1898.....	\$10,135 42
Permission to place weighing machines in ferry head-houses till February 1, 1900	National Automatic Machine Company	February 25, 1898.....	200 00 per year payable to city.
Building a sea-wall at Moon Island.....	Perkins, White & Co	March 18, 1898.....	10 00 per broom.
Refilling street sweeping machine brooms.....	Hickory Broom Fibre Company	April 30, 1898.....	
Furnishing dimension stones for flushing gutters and gate chambers for reservoir extension, Moon Island.....	Cape Ann Granite Company....	May 27, 1898.....	6,390 90
Laying gas pipes in Ruggles and Vancouver sts.....	A. N. Farrington.....	May 31, 1898.....	501 50 to be paid by Brookline Gas Co.
Furnishing Telford base for Ruggles and Vancouver sts	James T. Gilligan.....	June 29, 1898	0 50 per ton.
Building iron fences on Ipswich st.....	James Russell Boiler Works	July 25, 1898.....	875 00
Removing the old Boston and Maine Railroad Station on Canal st	A. A. Elston & Co	September 6, 1898.....	95 00 and the old material.
Furnishing 20,000 lin. ft. edgestones.....	Simpson Bros. Corporation.....	October 3, 1898.....	0 62 per lin. ft.
Paving, grading and building parapet wall on the outfall sewer embankment, Moon Island.....	Perkins, White & Co.....	December 30, 1898.....	5,500 00
Agreement to dispose of the house sewage only, of a portion of the City of Newton.....	City of Boston.....	January 4, 1899.....	\$13,350 to be paid by the City of Newton.
Agreement to keep the sewer at Moon Island free from grease for five years.....	W. J. Tavender.....	August 5, 1898.....	All grease and other materials removed to become the property of said Tavender.
Repairing streets along the route of the subway.....	Street Department.....	October 20, 1898.....	Boston Transit Commission to pay the Street Department the sum of \$17,500.
Making and placing an ornamental iron fence at Cottage Farm bridge.....	P. J. Dinn & Co.....	December 28, 1898.....	\$2.50 per lin. ft. on iron girders; \$2.85 per lin. ft. on stone wall.

List of Streets Paved with Trinidad Asphalt, February 1, 1899.

City Proper.

Name.	Location.	Length.	Area.	Year Laid.
Albany st.....	East Concord st. to East Springfield st.	450	2,700	1884
Arch st.....	Franklin st. to Milk st.....	426	1,267	1883-93
Ash st.....	Bennet st. to Nassau st.....	230	427	1887
Barton ct.....	Brighton st. to Barton st.....	134	186	1894
Batterymarch st..	Milk st. to Liberty sq.....	150	466	1896
Beacon st.....	Charles st., across Arlington st.....	870	3,800	1891
Beacon st.....	Dartmouth st. to within 150 ft. of westerly line of Gloucester st.....	1,744	9,277	1892
Beacon st.....	150 ft. from westerly line of Gloucester st. to 68 ft. beyond westerly line of Gloucester st.....	218	1,183	1898
Beacon st.....	68 ft. west of Gloucester st. to Massachusetts ave.....	1,019	5,391	1893
Bennet st.....	90 ft. west of Harrison ave. to 162 ft. east of Washington st.....	180	350	1887
Bond st.....	Hanson st. to Milford st.....	192	426	1895
Boylston st.....	East side of Berkeley st., across Clarendon st.....	656	3,869	1897
Brattle sq.....	Brattle st. to Elm st.....	281	670	1888
Brighton st.....	Leverett st. to Allen st.....	845	1,737	1892
Brimmer st.....	Beacon st. to Pinckney st.....	1,087	3,300	1895
Central st.....	Broad st. to Kilby st.....	313	869	1887
Chambers st.....	Green st., across Poplar st.....	460	1,061	1894
Chambers st.....	Brighton st. to Charles st.....	272	604	1895
Charter st.....	Hanover st., across Unity st.....	318	636	1894
Cherry st.....	Washington st. to Shawmut ave.....	334	594	1892
Clark st.....	Hanover st. to North st.....	319	614	1892
Columbus ave.....	B. & A. R. R. bridge, across Massachusetts ave.....	3,505	15,000	1884-87-88-91
Columbus ave.....	Massachusetts ave. to 301 ft. south of Camden st.....	903	5,418	1896
Corning st.....	Washington st. to Shawmut ave.....	338	734	1896
Congress sq.....	Between Devonshire st. and Congress st.....	19	37	1883
Cooper st.....	North Margin st., across Endicott st.....	194	597	1887
Cooper st.....	Endicott st. to Charlestown st.....	205	604	1887-97
Court st.....	Washington st. to Court sq.....	231	642	1891
Court sq.....	Court st. to Court st.....	665	1,883	1881-94
Davis st.....	Washington st. to Harrison ave.....	323	646	1892
Carried forw'd	.....	16,831	64,988	

List of Streets Paved with Trinidad Asphalt.—*Continued.*

City Proper.

Name.	Location.	Length.	Area.	Year Laid.
<i>Brought forward</i>		16,881	64,988	
Dartmouth st.....	Boylston st. to Newbury st.....	266	2,058	1894
Doane st.....	Kilby st. to Broad st.....	312	624	1881
Edinboro' st.....	Essex st. to Beach st.....	470	924	1895
Endicott st.....	Cooper st., across Thacher st.....	312	1,005	1884
Exchange pl.....	Congress st. to Kilby st.....	244	678	1887
Groton st.....	Washington st. to Shawmut ave.....	335	558	1892
Hanover ave.....	Hanover st. to North st.....	307	266	1892
Harrison ave.....	East Newton st. to E. Springfield st....	928	2,681	1888-95
Harrison ave.....	Northerly side of East Springfield st. to Roxbury line.....		130	1888-95
Hollis st.....	Tremont st. toward Washington st....	276	521	1891
Hudson st.....	Beach st. to within 90 ft. north of Curve st. (minus Kneeland and Harvard sts.)	1,407	3,938	1891
Kilby st.....	State st. to Milk st.(including Liberty sq.)	640	4,059	1881- 88-98
Laconia st.....	Washington st. to Harrison ave.....	330	727	1896
La Grange st.....	Tremont st. toward Washington st....	181	355	1897
Lincoln pl.....	Worcester st. to West Springfield st....	217	313	1897
Malcolm st.....	Mt. Vernon st. to Chestnut st.....	261	290	1892
Massachusetts ave.	Columbus ave. to Tremont st. (southerly roadway).....	267	1,621	1892
Massachusetts ave.	Tremont st. to Shawmut ave. (southerly roadway).....	470	2,934	1892
Massachusetts ave.	Shawmut ave. to Washington st. (south- erly roadway).....	180	994	1892
Moon st.....	Between North sq. and Fleet st.....	182	384	1891
North Bennet st...	Hanover st. to Salem st.....	552	920	1883
North Margin st...	Thacher st. to Wiget st.....	515	1,154	1895
Oxford st.....	Beach st. to Essex st.....	430	735	1895
Parkman st.....	North Anderson st., across Blossom st.,	241	550	1898
Parmenter st.....	Hanover st. to Salem st.....	279	764	1895
Pinckney st.....	Charles st., across Brimmer st.....	271	723	1893
Pine st.....	Washington st. to Harrison ave.....	419	597	1896
Poplar st.....	Chambers st. to Charles st.....	1,188	2,442	1887-92
Public alley 301...	Pinckney st. to River st.....	270	400	1897
Public alley 417...	Exeter st. toward Fairfield st.....	115	102	.....
Public alley 420...	Clarendon st. to Berkeley st.....	580	515	.....
<i>Carried forward</i>		29,326	98,950	

List of Streets Paved with Trinidad Asphalt. — Continued.
City Proper.

Name.	Location.	Length.	Area.	Year Laid.
<i>Brought forward</i>		29,326	98,950	
Public alley 437...	Arlington st. to Berkeley st.	631	561	1898
Spring st.	Poplar st. to Leverett st.	447	908	1895
Stevens st.	Lincoln pl. toward Shawmut st.	16	22	1897
Stillman st.	Between Salem st. and Endicott st.	150	417	1892
Stoddard st.	Howard st. to Court st.	135	150	1892
Sun Court st.	North st. to Moon st.	151	218	1891
Thacher st.	Charlestown st. to Endicott st.	203	562	1892
Tileston st.	155 ft. west of Hanover to Salem st.	417	470	1887-95
Unity st.	Charter st. to Tileston st.	330	500	1897
Warrenton st.	Eliot st. to Tremont st.	670	1,587	1891
Warrenton st.	Shawmut ave. to Washington st.	468	910	1891
Water st.	Congress st. to Kilby st.	255	694	1889
Water st.	Liberty sq. to Broad st.	252	682	1896
Wiggin st.	North Bennet st. to Tileston st.	107	119	1887
Wiget st.	Salem st. to North Margin st.	259	240	1897
		33,817	106,990	

Charlestown District.

Austin st.	Seminary pl. to Lawrence st.	144	421	1891
Bunker Hill st. ...	At Tufts st.		150	1897
Corey st.	124 ft. north of Moulton st. to Moulton st.	124	276	1897
Moulton st.	Easterly side of Corey st. to Vine st. ...	81	243	1897
Moulton st.	Vine st. to Bunker Hill st.	130	390	1897
Rutherford ave ...	Devens st., 123 ft. westerly	128	284	1897
Tufts st.	Bunker Hill st., 141 ft. northerly	141	415	1897
Vine st.	Bunker Hill st. across Moulton st.	165	670	1897
		913	2,849	

South Boston.

D st.	West Fifth st. to Gold st.	126	448	1889
E st.	West Third st. to Bolton st.	111	410	1892
Rogers st.	Dorchester st. to Preble st.	360	480	1891
West Sixth st.	West of C st. toward D st.	91	305	1887
West Third st.	153 ft. west of E st., across E st.	185	769	1892
		873	2,412	

List of Streets Paved with Trinidad Asphalt. — Concluded.
Roxbury.

Name.	Location.	Length.	Area.	Year Laid.
Cabot st.	Tremont st. to Vernon st.	1,959	6,550	1891-92
Cabot st.	Easterly side Vernon st. to Linden Park st.	484	1,390	1897
Columbus ave.	From 301 ft. south of Camden st. across Terry st.	2,640	15,840	1896
		5,083	23,789	

Streets Paved with Sicilian Rock Asphalt.
City Proper.

Name.	Location.	Length.	Area.	Year Laid.
Acton st.	Washington st. to Bradford st.	259	352	1896
Albany st.	Easterly side of Stoughton st., across East Concord st.	285	1,710	1897
Avery st.	Washington st. to Mason st.	360	275	1897
Ash st.	Oak st. across Nassau st.	220	391	1895
Barton st.	Leverett st. to Milton st.	427	723	1895
Bradford st.	Waltham st. to Shawmut ave.	600	1,270	1897
Charles st.	Between Revere st. and Cambridge st. (in front of Eye and Ear Infirmary)	191	225	1895
Cobb st.	Washington st. to Shawmut ave.	347	1,041	1897
Decatur st.	Washington st. to Harrison ave.	370	781	1892
Dwight st.	Shawmut ave. to Tremont st.	716	2,075	1893
Exeter pl.	Chauncey st. to Harrison ave.	170	387	1897
Fabin st.	Newland st. to Ivanhoe st.	421	615	1895
Fay st.	Dover st. to Harrison ave.	318	560	1894
Hamburg st.	Mystic st. to Harrison ave.	383	597	1896
Hanover st.	Tileston st. across Charter st.	315	934	1896
Huntington ave. ..	Boston & Albany Railroad bridge to Cumberland st.	1,591	8,840	1896
Mason st.	From a point 213 ft. south of West st. for a distance of 231 ft. southerly.	231	480	1894
Massachusetts av. ..	Washington st. to Albany st. (southerly roadway)	662	4,151	1894
Mayo st.	Castle st. to Cobb st.	251	418	1897
Meander st.	East Dedham st. to Malden st.	307	437	1896
Motte st.	Washington st. to Harrison ave.	332	516	1892
Mystic st.	Malden st. to East Dedham st.	204	226	1896
Mystic st.	East Dedham st. to East Canton st.	215	335	1896
<i>Carried forward</i>		9,175	27,339	

List of Streets Paved with Sicilian Rock Asphalt. — *Concluded.*
City Proper.

Name.	Location.	Length.	Area.	Year Laid.
<i>Brought forward</i>		9,175	27,339	
Mystic st.	East Canton st. to East Brookline st. . .	216	337	1896
North Margin st. . .	Thacher st. toward Endicott st.	205	518	1897
Norwich st.	Mystic st. to Meander st.	221	339	1896
Ohio st.	Washington st. to Shawmut ave.	343	277	1896
Pemberton st.	Front of Suffolk Court House	323	1,365	1894
Prince st.	Hanover st. to Bennet ave.	293	654	1895
Shawmut ave.	132 ft. south of Castle st. across Cherry st.	327	945	1898
Taylor st.	Dwight st. to Milford st.	196	274	1896
Whitmore st.	Kneeland st. to Harvard st.	249	445	1895
		11,548	32,493	

South Boston.

Athens st.	West Second st. to A st.	617	916	1895
Athens st.	B st. to C st.	515	746	1892
East Broadway ..	Front of Lincoln School	180	1,000	1897
K st.	East Sixth to East Eighth st.	566	1,083	1896
West Broadway ..	From 196 ft. east of easterly line of Dorchester ave. to A st.	360	2,000	1892
West Broadway ..	Gardner pl. to 150 ft. easterly	150	648	1893
West Broadway ..	Between New England bridge and E st. (4-ft. gutters)		1,487	1897
West Broadway ..	150 ft. west of F st. to 267 ft. east of F st.	448	1,544	1897
West Broadway ..	267 ft. east of F st. to Dorchester st.	410	1,818	1898
		3,246	11,242	

Charlestown.

Warren st.	Winthrop st. to Soley st.	127	365	1895
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Roxbury.

Columbus ave.	Terry st. to within 61 ft. north of Sta- tion st.	884	5,304	1896
Huntington ave. . .	Easterly side Cumberland st. to Massa- chusetts ave.	747	4,150	1896
Huntington ave. . .	Massachusetts ave. to Gainsborough st. .	587	3,372	1896
		2,218	12,826	

Streets Paved with Seyssel Asphalt.**City Proper.**

Name.	Location.	Length.	Area.	Year Laid.
Paul st.....	Emerald st. to Village st.....	133	236	1897
Paul st....	Village st. to Tremont st.....	276	456	1897
Pelham st.....	Washington st. to Shawmut ave.....	320	693	1897
Waterford st.....	Washington st. to Shawmut ave.....	316	544	1897
		1,045	1,929	

Other Asphalt Streets.

Name.	Location.	Length.	Area.	Year Laid.
Harris st.....	Hanover st. to North st., coal tar (Ayers),	294	425	
Hayward pl.....	Harrison ave. to Washington st. (asphaltina).....	260	578	1898
Massachusetts av.	Columbus ave. to Tremont st. (asphaltina).....	267	1,622	1897
Public alley 436....	Clarendon st. to Berkeley st. (tar concrete), ...	580	516	1898
I st., S. Boston....	E. Broadway to E. Fourth st., coal tar (Ayers)	272	1,627	
		1,673	4,168	

Summary.

Trinidad asphalt....	Length	40,686 ft. or 7.70 miles or 136,040 sq. yds.
Sicilian rock asphalt..	"	17,139 " " 3.24 " " 56,926 " "
Seyssel asphalt.....	"	1,045 " " 0.20 " " 1,929 " "
Other asphalts	"	1,673 " " 0.32 " " 4,168 " "
Total sheet asphalts,		60,543 " " 11.46 " " 199,063 " "
Asphalt blocks.....	"	3,940 " " 0.75 " " 11,325 " "
Total		64,483 " " 12.21 " " 210,388 " "

Street Mileage.

The following table shows the length of public highways and character of the pavements, February 1, 1899:

DISTRICTS.	Asphalt.	Block.	Brick.	Cobble.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1897 Report....	11.50	82.95	0.38	1.47	261.31	102.43	11.15	471.19
February 1, 1899.								
City Proper.....	*9.80	†44.67	0.60	0.92	26.20	0.41	0.12	82.72
Charlestown.....	0.20	9.04	.....	.....	13.69	.....	0.02	22.95
East Boston.....	.....	4.95	.....	0.13	6.74	15.37	0.12	27.31
South Boston.....	0.83	12.91	.....	0.05	21.17	1.55	6.32	42.83
Roxbury.....	1.38	9.25	.....	0.04	62.93	10.31	2.22	86.13
West Roxbury.....	.....	0.10	.....	.....	47.63	29.08	1.09	77.90
Dorchester.....	.....	4.26	.....	.....	69.20	23.30	1.17	97.93
Brighton.....	.....	.....	.....	.....	22.67	18.70	0.33	41.70
Total.....	12.21	85.18	0.60	1.14	270.23	98.72	11.39	479.47

NOTE.—The above districts refer to areas enclosed by the original boundary lines.

* Of this amount 0.75 miles = asphalt blocks.

† Of this amount 6.37 miles = granite-block paving on concrete base.

2.29 miles of public alleys, chap. 298, Acts of 1898, included in this table.

Total length of public streets 479.47 miles.

There have been laid out and accepted by the Street Commissioners during the year, 5.63 linear miles of public streets and 2.29 miles of public alleys; corrections to previous measurements on account of revision and correction of previous tables from all causes show an increase of 0.36 miles, making a total net increase of 8.28 miles.

The rate of increase from year to year is shown in the following table:

1859.....111.50 miles.	1880.....350.54 miles.	1890.....404.60 miles.
1871.....201.32 "	1881.....355.50 "	1891.....409.60 "
1872.....207.40 "	1882.....359.85 "	1892.....434.59 "
1873.....209.24 "	1883.....367.99 "	1893.....443.34 "
1874.....313.90 "	1884.....374.10 "	1894.....447.65 "
1875.....318.58 "	1885.....379.60 "	1895.....452.12 "
1876.....327.50 "	1886.....383.55 "	1896.....456.11 "
1877.....333.20 "	1887.....390.30 "	1897.....459.12 "
1878.....340.39 "	1888.....392.72 "	1898.....471.19 "
1879.....345.19 "	1889.....397.84 "	1899.....479.47 "

Areas of Pavement.

The following table shows the area of pavements in square yards arranged by districts:

DISTRICTS.	Asphalt.	Block.	Brick.	Cobble.	Macadam.	Gravel.	Not Graded.	Totals.
Year 1897 Report	203,728	1,800,105	5,018	16,576	4,837,473	1,644,330	300,224	8,807,454
Feb. 1, 1899.								
City Proper.....	155,875	970,136	6,050	8,302	497,663	2,998	8,064	1,649,091
Charlestown....	3,214	203,241	.....	.....	205,143	.....	275	411,873
East Boston....	.....	111,012	.....	2,600	140,251	283,535	2,418	39,816
South Boston...	14,681	274,609	.....	1,192	376,458	30,319	168,034	865,293
Roxbury.....	36,615	203,857	.....	377	1,158,676	154,592	47,711	1,601,828
West Roxbury..	.....	2,347	.....	.....	812,076	436,040	21,583	1,272,046
Dorchester.....	.....	94,046	.....	.....	1,239,360	373,726	64,029	1,771,161
Brighton.....	.....	.....	.....	.....	567,057	294,386	9,277	870,720
Total.....	210,388	1,859,248	6,050	12,471	4,996,684	1,575,596	321,391	8,981,828

NOTE.-- The above districts refer to areas enclosed by the original boundary lines.

* Of this amount 11,325 square yards = asphalt blocks.

† Of this amount 133,285 square yards = granite-block paving on concrete base.

11,489 square yards of public alleys, chap. 298, Acts of 1898, included in this table.

INCOME.

Statement showing the amount of bills and cash deposited with City Collector, less bills withdrawn, for the year ending January 31, 1898, by the several divisions of the Street Department:

Bridge Division	\$275 00
Boston and Cambridge Bridges	646 20
Ferry Division	293,627 65
Paving Division	56,361 66
Sanitary Division	31,604 11
Sewer Division	635,421 91
Street-Cleaning Division	5,943 99
Street-Watering	137,874 02
	<u>\$1,161,754 54</u>

Statement showing the amount paid into the city treasury during the same period on account of the several divisions of the Street Department

Bridge Division	\$600 00
Boston and Cambridge Bridges	646 20
Ferry Division	293,496 15
Paving Division	50,433 32
Sanitary Division	29,267 90
Sewer Division	312,655 61
Street-Cleaning Division	1,873 24
Street-Watering	109,273 51
	\$798,245 93

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS.

From assessments on abutters for cost of sidewalk in front of their premises, chapter 401, Acts 1892	\$8,736 12	
Interest on do.	2,534 76	
		\$11,270 88
Sewer assessments, chapter 402, Acts 1892	\$77,783 31	
Interest on do.	13,566 23	
		91,349 54
Street Construction, chapter 323, Acts 1891, and amendments, assessments :		
Abbotsford street	\$463 99	
Interest on do.	188 62	
		652 61
Audubon road	\$20,378 65	
Interest on do.	1,587 82	
		21,966 47
Batavia street	\$159 15	
Interest on do.	79 59	
		238 74
Bloomfield street	\$523 91	
Interest on do.	20 14	
		544 05
Boylston street	\$39,680 00	
Interest on do.	320 65	
		40,000 65
Carried forward		\$166,022 94

<i>Brought forward</i>	.	.	.	\$166,022 94
Brighton avenue	.	.	\$9,510 00	
Interest on do.	.	.	28 40	
				9,538 40
Fullerton street	.	.	\$442 38	
Interest on do.	.	.	24 16	
				466 54
Greenbrier street	.	.	\$12,446 06	
Interest on do.	.	.	1,614 15	
				14,060 21
Josephine street	.	.	\$310 16	
Interest on do.	.	.	218 83	
				528 99
Kenmore street	.	.	\$705 86	
Interest on do.	.	.	114 61	
				820 47
Miner street	.	.	\$1,242 85	
Interest on do.	.	.	395 57	
				1,638 42
Newbury street	.	.	\$727 42	
Interest on do.	.	.	682 83	
				1,410 25
Norway street	.	.	\$377 82	
Interest on do.	.	.	193 92	
				571 74
St. Germain street	.	.	\$3,411 86	
Interest on do.	.	.	363 09	
				3,774 95
Wolcott street	.	.	\$293 45	
Interest on do.	.	.	18 71	
				312 16
Canal street, paving, between rail- road tracks	.	.	.	3,110 30
Columbus avenue, sale of old build- ings	.	.	.	5,742 25
				<u>\$207,997 62</u>

BLUE HILL AND OTHER AVENUES.

Paving between railroad tracks and grading	.	.	.	.	:	.	<u>\$13,751 87</u>
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PART II.

APPENDICES.

PAGES 1 TO 285.

APPENDIX A.

REPORT OF THE DEPUTY SUPERINTENDENT OF THE BRIDGE DIVISION.

927 AND 928 TREMONT BUILDING,
BOSTON, February 1, 1899.

MR. BENJ. W. WELLS,

Superintendent of Streets:

DEAR SIR,—I herewith submit my annual report of the expenditures, income and operations of the Bridge Division of Street Department for the financial year ending January 31, 1899.

The sum of \$130,000 was appropriated for the care and maintenance of this division during the year. The total number of bridges in charge of this division previous to the enactment of chapter 467 of the Acts of 1898 was 73. Chapter 467 of the Acts of 1898 authorized the appointment of a commission by the cities of Boston and Cambridge to construct and maintain a bridge over the Charles river, to be known as the Cambridge bridge, at, upon or near the site of the so-called West Boston bridge, and provided that said bridge and draw and all other bridges and draws between the two cities should be maintained by Boston and Cambridge under the care of this commission.

In accordance with this Act, on July 1, 1898, four bridges of this division, viz., Essex street, Cambridge street, North Harvard street and Western avenue bridge to Cambridge were transferred to this commission, thus leaving 69 bridges in the care of this division. This number does not include culverts.

The total number of bridges in Boston is 132, 32 of which are supported wholly by railroad corporations, 100 are wholly or in part supported by the city of Boston, including the four transferred to the commission. There are eighteen tide-water draw-bridges, of which six are operated by steam, four by electricity, and eight by hand power.

The inland bridges have been given a careful inspection, and every effort made to keep them in a safe condition.

They have been thoroughly swept, and kept free and clean.

Good discipline has been maintained among the men. They have faithfully and efficiently performed their respective duties, and no accidents have occurred through neglect of duty.

I would recommend that the following-named bridges be provided with proper machinery to assist vessels through the draw, and thus obviate largely the inconvenience to public travel, — Chelsea North, Federal street, Dover street, Mt. Washington avenue, Meridian street, and Malden bridge.

Respectfully yours,

WM. H. CARBERRY,
Deputy Superintendent.

OBJECT OF EXPENDITURES.

ADMINISTRATION.

Office expenses :	
Printing reports, etc.	\$288 53
Stationery and office books	195 98
Telephone, photographs, etc. . . .	322 50
Sundry office supplies	136 30
	\$943 31
Salaries of Deputy Superintendent, Chief Clerk and Messenger	5,933 33
Salaries of Chief Drawtender and Chief of Draws and Bridges	3,590 08
Board of Deputy Superintendent's horse, extra horse and carriage hire	679 70
Telephone at Deputy Superintendent's house . .	61 86
Amount expended, administration	<u>\$11,208 28</u>

OBJECT OF EXPENDITURES.

Office Expenses.

Salaries	\$9,523 41
General office expenditures	1,684 87
	<u>\$11,208 28</u>

REGULAR EXPENDITURES.

Administration	\$11,208 28
On tide-water bridges	92,035 93
On inland bridges	12,136 17
North yard and stable	5,353 92
South yard and stable	8,518 73
Total	<u>\$129,253 03</u>

FINANCIAL STATEMENT.

REGULAR APPROPRIATION.

Appropriation 1898-99	\$130,000 00
Amount of expenditures from February 1, 1898, to January 31, 1899	\$129,253 03
Transferred to Street Cleaning Division January 31, 1899	538 30
Transferred to Sanitary Division January 31, 1899, ...	208 67
Total	<u>\$130,000 00</u>

SPECIAL APPROPRIATIONS IN CHARGE OF BRIDGE DIVISION.

OBJECT OF APPROPRIATION.	Appropriations, Balances and Transfers.	Expended Feb. 1, 1898, to Jan. 31, 1899.	Balances on hand Jan. 31, 1899.
Gold-street bridge	\$9,328 02	\$9,328 02	
Harvard-street bridge reconstruction..	2,643 80	335 91	\$2,307 89
Reconstruction of bridges.....	11,615 38	10,670 13	945 25
Talbot-avenue bridge.....	25,000 00	25,000 00	
Totals.....	\$48,587 20	\$45,334 06	\$3,253 14

Amount of expenditures February 1, 1898, to January 31, 1899	\$45,334 06
Balances unexpended	3,253 14
Amount of appropriations and transfers	<u>\$48,587 20</u>

AMOUNTS CHARGED TO SPECIAL APPROPRIATIONS IN CHARGE OF OTHER DIVISIONS.

NAME OF APPROPRIATION.	Where expended.	Amount expended.
Abolishment of grade crossings.....	Congress-st. sidewalk ...	\$118 71
Blue Hill and other avenues.....	Cottage Farm bridge	563 89
City Council, Incidental Expenses.....	Jeffries Point landing ...	300 00
Laying-out and construction of highways .	Ipswich-street bridge....	1,795 39
Reserved fund.....	Accident, Meridian- street bridge.....	50 00
Stony Brook Improvement.....	Coffer dam, Roxbury Crossing	66 60
Total		<u>\$2,894 59</u>

Amount expended and charged to regular appropriation	\$129,253 03	
Amount expended and charged to Bridge Division, specials	45,334 06	
Amount expended and charged to appropriations in charge of other divisions	2,894 59	
Grand total of expenditures February 1, 1898, to January 31, 1899	<u>\$177,481 68</u>	

A detailed statement of expenditures and description of work performed follows; also a list of those bridges supported wholly or in part by the city of Boston; statement of the public landing-places; list of cable-houses and boxes; census of traffic taken on some of the most important bridges; number of draw openings made for navigation; width of draw openings, and table showing widths of bridges and kind of roadway and sidewalks.

TIDE-WATER BRIDGES.

Broadway bridge (over Fort Point channel).

Patched deck in various places, patched sheathing in numerous places under twenty-seven orders issued at different times, repaired waterway, sidewalks, fence, machinery, engines, built and painted new house on the pier and painted the draw-house.

Carpenters	\$1,580 40	
Painters	369 75	
Lumber and nails	1,409 03	
Paint stock	52 82	
Repairing engines, machinery, etc.	426 05	
Sundry expenses	51 90	
		\$3,889 95
Regular expenses :		
Draw-tenders	\$5,102 34	
Substitutes	380 00	
Coal, gas, water and supplies	292 27	
Rowboat	65 00	
		5,839 61
		\$9,729 56

Cambridge-street bridge (from Brighton to Cambridge).

Repaired counterbalance and machinery	\$74 34	
<i>Carried forward,</i>	\$74 34	\$9,729 56

<i>Brought forward,</i>	\$74 34	\$9,729 56
Regular expenses :		
Draw-tender	\$154 66	
Supplies	6 31	
	160 97	
		235 31

Charles-river bridge (from Boston to Charles-town).

Sheathed the draw, patched draw and deck various times, repaired fence, sidewalk, gate, engines, water-pipes, put in new steam winch, reset buoy and painted fence and room.

Carpenters	\$404 93	
Painters	62 50	
Lumber and nails . .	256 02	
New steam winch and re-		
pairing engines . . .	135 43	
Resetting buoy . . .	195 00	
Plumbing and teaming .	34 39	
	\$1,088 27	

Regular expenses :

Draw-tenders	\$4,429 02	
Substitutes	182 50	
Coal, gas, cordage and		
supplies	731 30	
	5,342 82	
		6,431 09

Chelsea bridge [North] (over North channel, Mystic river).

Sheathed the draw, repaired iron fence, machinery, motor and switch, put in truck, reset buoy, painted fence and inside of draw-house.

Carpenters	\$190 15	
Painters	396 00	
Lumber and nails . .	97 75	
Paint stock	61 70	
Repairing machinery, iron		
fence and electric motor,	149 46	
Resetting buoy . . .	213 90	
Plumbing	37 01	
Damage to tug	74 86	
	\$1,220 83	

Regular expenses :

Draw-tenders	\$4,386 72	
Coal, electric lights, flag		
and sundries	182 23	
	4,568 95	
		5,789 78
<i>Carried forward,</i>		\$22,185 74

Brought forward,

\$22,185 74

Chelsea bridge [South] (over South channel,
Mystic river).

Patched deck, sheathing and pier, built new gate
and fence, repaired engine, machinery, water-
pipes, and painted roof of house.

Carpenters . . .	\$201 23	
Painters . . .	77 50	
Lumber and nails . . .	86 30	
Paint stock . . .	11 07	
Repairing engine, machinery and water-pipes . . .	128 07	
Plastering . . .	10 50	
		\$514 67

Regular expenses :

Draw-tenders . . .	\$5,348 54	
Substitute . . .	10 00	
Coal, gas and supplies . . .	293 24	
		5,651 78

6,166 45

Chelsea-street bridge (from East Boston to
Chelsea).

Sheathed bridge in part, repaired fence, and
painted bridge.

Carpenters . . .	\$29 40	
Painters . . .	180 76	
Lumber and nails . . .	69 64	
Hand-wheel . . .	4 50	
		\$284 30

Regular expenses :

Draw-tender . . .	\$299 00	
Coal and supplies . . .	10 55	
		309 55

593 85

Commercial Point or Tenean bridge (Dor-
chester).

Built temporary fence, new deck, and sheathing on
draw, and repaired hoisting machinery.

Carpenters . . .	\$124 25	
Lumber and nails . . .	109 03	
Hoisting chain and iron- work . . .	17 07	
		\$250 35

Regular expenses :

Draw-tender . . .	\$50 00	
Supplies . . .	2 20	
		52 20

302 55

Carried forward,

\$29,248 59

Brought forward,

\$29,248 59

Congress-street bridge (over Fort Point channel).

Sheathed draw three times, patched deck, sheathing and sidewalk, repaired fence, waterways, fender-guard, pier, foundation to draw-house and machinery, painted draw-house, fence, and iron-work under draw.

Carpenters	\$904 86	
Painters	343 50	
Lumber and nails . .	830 64	
Paint stock	55 33	
Repairing fender-guard and corner	500 00	
Repairing pier	300 00	
Repairing foundation to draw-house	900 00	
Repairing fence, machinery, rack, gates, and iron guard	362 36	
Teaming old lumber . .	40 00	
		\$4,236 69

Regular expenses:

Draw-tenders	\$5,391 62	
Substitutes	15 00	
Coal, water, and supplies .	486 29	
		5,892 91

10,129 60

Dover-street bridge (over Fort Point channel).

Patched sheathing in various places; put in oak headers, repaired sidewalk, machinery, iron fence, electric controller, reset buoy, put in gas fixtures and connections in draw-house and painted hood.

Carpenters	\$219 00	
Painters	46 25	
Lumber and nails . .	160 86	
Paint stock	7 00	
Repairing iron fence, machinery, electric controller	259 52	
Gas fixtures and connections	67 00	
Resetting buoy	98 93	
Teaming	10 00	
		\$868 56

Carried forward,

\$868 56		\$39,378 19
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<i>Brought forward,</i>	\$868 56	\$39,378 19
Regular expenses :		
Draw-tenders . . . \$5,284 24		
Substitutes . . . 185 00		
Coal and supplies . . 79 38		
	5,548 62	

6,417 18

Essex-street bridge (from Brighton to Cambridge).

Repaired machinery, hinge and flap.

Carpenters . . . \$12 50	
Lumber . . . 4 70	
Bolts . . . 5 80	
Repairing machinery . . 70 38	
	\$93 38

Regular expenses :

Draw-tender 278 52	

371 90

Federal-street bridge (over Fort Point channel).

Sheathed draws, repaired sheathing, put in oak headers, new gate, ring bolts, repaired landing, sidewalk, machinery, smoke-stack, iron fence, and electrical apparatus, and painted and oiled draw-house.

Carpenters . . . \$265 84	
Painters . . . 88 50	
Lumber and nails . . 80 95	
Paint stock . . . 12 60	
Repairing machinery, furnace, iron fence, and electrical apparatus . . 296 34	
	\$744 23

Regular expenses :

Draw-tenders . . . \$5,284 24	
Substitutes . . . 197 50	
Coal, gas and supplies . . 175 18	
	5,656 92

6,401 15

Granite bridge (from Dorchester to Milton).

Sheathed draw, repaired sheathing, and put in new flaps.

Carpenters . . . \$50 95	
Lumber . . . 46 79	
Ironwork . . . 10 23	
	\$107 97

Carried forward,

\$107 97 \$52,568 42

<i>Brought forward,</i>	\$107 97	\$52,568 42
Regular expenses:		
Draw-tender	\$239 20	
Supplies	75	
	239 95	
		347 92

L-street bridge (over reserved channel at junction of Congress and L streets).
 Sheathed the draw, repaired machinery, new smoke-stack, wire rope, grates, repaired water pipes and reset buoys, and painted house in part.

Carpenters	\$149 65	
Painters	28 00	
Lumber and nails . .	87 82	
New ironwork, smoke-stack, wire rope and grates .	122 48	
Plumbing	58 12	
Resetting buoys . . .	187 50	
		\$633 57
Regular expenses:		
Draw-tenders	\$3,993 46	
Substitutes	962 50	
Coal and supplies . . .	457 85	
		5,413 81
		6,047 38

Malden bridge (from Charlestown to Everett).
 Sheathed the draw, patched deck and sheathing in various places, repaired up-stream pier, new chimney on draw-house and painted and oiled house inside.

Carpenters	\$207 00	
Painters	117 75	
Lumber	65 59	
Paint stock	16 82	
Repairing up-stream pier .	500 00	
Ironwork and new chimney .	15 43	
		\$922 59
Regular expenses:		
Draw-tenders	\$3,589 04	
Substitutes	125 00	
Coal, gas, rowboat and supplies	169 58	
		3,883 62
		4,806 21
<i>Carried forward,</i>		\$63,769 93

Brought forward,

\$63,769 93

Meridian-street bridge (from East Boston to Chelsea).

Sheathed the draw, repaired sheathing, fence, sidewalk, stable, steps, waterway, machinery and electrical apparatus.

Carpenters	\$248 05	
Painters	11 00	
Lumber and nails . .	119 79	
Repairing machinery, electrical apparatus, also new segments	517 52	
		\$896 36

Regular expenses :

Draw-tenders	\$4,386 72	
Substitutes	110 00	
Horseshoeing	26 65	
Coal, feed, gas, flag and supplies	257 27	
		4,780 64

5,677 00

Mt. Washington-avenue bridge (over Fort Point channel).

Sheathed draw, patched sheathing and deck various times, repaired fender-guard, waterway, pier, steps and ladder, shingled roof, reset buoy, and painted house and roof.

Carpenters	\$957 18	
Painters	166 50	
Lumber and nails . .	508 38	
Paint stock	23 70	
Repairing fender-guard .	580 00	
Ironwork and resetting buoy	127 00	
		\$2,362 76

Regular expenses :

Draw-tenders	\$5,038 80	
Substitutes	145 00	
Rent of land	60 00	
Coal, gas, flag, rowboat and supplies	234 45	
		5,478 25

7,841 01

Neponset bridge (from Dorchester to Quincy).

Patched sheathing four times, repaired machinery, pier and gear-box.

Carried forward,

\$77,287 94

Brought forward,

\$77,287 94

Carpenters	\$296 85	
Lumber	50 22	
Repairing machinery . .	40 81	
		\$387 88

Regular expenses:

Draw-tender	\$398 84	
Supplies	75	
		399 59

787 47

North Beacon-street bridge (from Brighton to Watertown).

Sheathed draw, built new sidewalk and patched sheathing.

Carpenters	\$43 50	
Lumber and nails . . .	85 80	
Ironwork	10 89	
		\$140 19

Regular expenses:

Draw-tender	\$60 89	
Substitute	58 61	
		119 50

259 69

North Harvard-street bridge (from Brighton to Cambridge).

Put in new flaps and repaired latch.

Carpenters	\$10 00	
Lumber	2 11	
Ironwork	6 52	
		\$18 63

Regular expenses:

Draw-tender	\$154 66	
Fuel	1 66	
		156 32

174 95

Warren bridge (from Boston to Charlestown).

Sheathed the draws, repaired deck, steps, fence, pier, sidewalk, patched sheathing ten different times, built new winch-house and sand box, three new gates, repaired machinery, slate roof and water pipes, new concrete walk and painted draw-house, boilers, gates and fence.

Carpenters	\$1,465 69	
Painters	196 00	

Carried forward, \$1,661 69

\$78,510 05

<i>Brought forward,</i>	\$1,661 69	\$78,510 05
Lumber and nails	405 41	
Paint stock	23 74	
Ironwork, repairing machinery, trucks, fence and gates	812 86	
New steam winch	475 00	
New concrete walk	324 15	
Repairing slate roof, covering steam pipe, plumbing and teaming	211 01	
		\$3,913 86

Regular expenses :

Draw-tenders	\$5,284 24	
Substitutes	219 00	
Coal, gas, flag, row-boat and supplies	855 37	
		6,358 61

10,272 47

Western-avenue bridge (from Brighton to Cambridge).

Sheathed draw and repaired flaps.

Carpenters	\$31 25	
Lumber	15 98	
Chains, bolts and plates	27 18	
		\$74 41

Regular expenses :

Draw-tender	\$154 66	
Fuel	1 67	
		156 33

230 74

Western-avenue bridge (from Brighton to Watertown).

Sheathed draw, patched sheathing, new headers, new gate, repaired machinery and painted bridge.

Carpenters	\$172 20	
Painters	217 50	
Lumber	85 55	
Truss-rods, clamps and bolts	24 98	
		\$500 23

Regular expenses :

Draw-tender	\$60 89	
Substitute	118 62	
Coal and supplies	7 89	
		187 40

687 63

Carried forward,

\$89,700 89

Brought forward, \$89,700 89
Winthrop bridge (from Breed's Island to Winthrop).

Patched sheathing.

Lumber \$16 74

Regular expenses :

Draw-tender . . . \$100 00

Supplies 1 65

101 65

118 39

Sundry expenditures on tide-water bridges :

Oak lumber for headers . \$385 20

Nails 78 42

Sundry car-fares, Boston
 Elevated Railway Co.
 (mechanics) . . . 200 00

Sundry Street Department
 tickets, N. Y., N. H. &
 H. R.R. (mechanics) . 20 00

\$683 62

Regular expenses :

Messenger to Chief Draw-
 tender \$797 68

Draw-tenders' books . . 119 78

Sundry supplies . . . 258 44

1,175 90

1,859 52

Public landings.

Commercial wharf :

Repaired float and run.

Carpenters \$54 15

Truck-wheels, shackles, etc. 14 75

\$68 90

East Boston :

New wheels on run.

Ironwork \$13 23

Regular expenses :

Rent of flats and
 dock . . . \$250 00

Watchman . . . 25 00

275 00

288 23

357 13

Total expended on tide-water bridges, \$92,035 93

NOTE. — By statute, Western-avenue bridge to Cambridge, Cambridge-street, North Harvard-street and Essex-street bridges were placed in charge of Cambridge Bridges Division on July 1, 1898.

RECAPITULATION.

*Table showing Expenditures on the Tide-water Bridges from
February 1, 1898, to January 31, 1899.*

NAME OF BRIDGE.	Repairs, Labor, Lumber, Ironwork and Painting.	Regular Ex- penses, Salaries, Fuel and Supplies.	Total.
Broadway	\$3,889 95	\$5,839 61	\$9,729 56
Cambridge street.....	74 34	160 97	235 31
Charles river	1,088 27	5,342 82	6,431 09
Chelsea (North)	1,226 83	4,568 95	5,789 78
Chelsea (South).....	514 67	5,651 78	6,166 45
Chelsea street.....	284 30	309 55	593 85
Commercial point.....	250 35	52 20	302 55
Congress street	4,236 69	5,892 91	10,129 60
Dover street	868 56	5,548 62	6,417 18
Essex street	93 38	278 52	371 90
Federal street.....	744 23	5,656 92	6,401 15
Granite	107 97	239 95	347 92
L street	633 57	5,413 81	6,047 38
Malden.....	922 59	3,883 62	4,806 21
Meridian street	896 36	4,780 64	5,677 00
Mt. Washington avenue.....	2,362 76	5,478 25	7,841 01
Neponset.....	387 88	399 59	787 47
North Beacon street	140 19	119 50	259 69
North Harvard street.....	18 63	156 32	174 95
Warren	3,913 86	6,358 61	10,272 47
Western avenue (to Cambridge).	74 41	156 33	230 74
Western avenue (to Watertown).	500 23	187 40	687 63
Winthrop	16 74	101 65	118 39
Sundry expenditures.....	683 62	1,175 90	1,859 52
Public landings.....	82 13	275 00	357 13
	\$24,006 51	\$68,029 42	\$92,035 93

INLAND BRIDGES.

Albany-street bridge (over Boston & Albany Railroad).

Patched sheathing five times, and repaired sidewalk.

Carpenters	.	.	.	.	.	\$80 63
Lumber	.	.	.	.	.	83 76
Nails	.	.	.	.	.	1 80

 \$166 19
Allston bridge (over Boston & Albany Railroad at Cambridge street).

Sheathed one side, patched deck and sheathing, and laid new border.

Carpenters	.	.	.	.	.	\$107 30
Lumber	.	.	.	.	.	106 17
Nails	.	.	.	.	.	5 40

 218 87
Ashland-street bridge (over New York, New Haven & Hartford Railroad, Providence Division).

Patched sheathing twice, built and painted fence.

Carpenters	.	.	.	.	.	\$23 00
Painters	.	.	.	.	.	34 50
Lumber	.	.	.	.	.	20 25
Nails and bolts	.	.	.	.	.	2 55
Paint stock	.	.	.	.	.	6 25

 86 55
Ashland-street culvert (at Canterbury street, West Roxbury).

New deck and sheathing.

Carpenters	.	.	.	.	.	\$107 70
Lumber	.	.	.	.	.	94 01

 201 71
Athens-street bridge (over New York, New Haven & Hartford Railroad, Midland Division).

Repaired sidewalk.

Carpenters	.	.	.	.	.	2 50
------------	---	---	---	---	---	------

Baker-street bridge (at Brook Farm, West Roxbury).

Patched sheathing.

Carpenters	.	.	.	.	.	\$23 55
Lumber	.	.	.	.	.	12 66

 36 21
Carried forward,

 \$712 03

Brought forward,

\$712 03

Beacon-street bridge (over Boston & Albany Railroad).

Decked and sheathed part, and painted bridge.

Carpenters	\$378 61
Painters	248 00
Lumber, nails, lag screws, and bolts	393 86
Paint stock	25 43
Teaming	20 00

1,065 90

Beech-street culvert (near Anawan avenue, West Roxbury).

Patched sheathing.

Carpenters	\$13 55
Lumber	6 67

20 22

Berkeley-street bridge (over Boston & Albany Railroad).

Sheathed bridge, patched deck and sheathing, and repaired sidewalk.

Carpenters	\$64 15
Lumber	47 18
Nails	24
Teaming	5 00

116 57

Berkeley-street bridge (over New York, New Haven & Hartford Railroad, Providence Division).

Sheathed bridge, patched sheathing, deck, and border.

Carpenters	\$171 05
Lumber	312 77
Nails	10 80

494 62

Berwick Park [foot] bridge (over New York, New Haven & Hartford Railroad, Providence Division).

Repaired steps, and added safety treads to same.

Carpenters	\$47 50
Lumber	4 24
Stair-treads	168 00
Hardware	2 85

222 59

Carried forward,

\$2,631 93

Brought forward,

\$2,631 93

Blakemore-street bridge (over New York,
New Haven & Hartford Railroad, Providence
Division).

Patched sheathing.

Carpenters	.	.	.	.	.	\$24 15
Lumber	.	.	.	.	.	39 73

63 88

Boylston-avenue bridge (over Stony brook,
West Roxbury).

Reconstructed bridge.

Carpenters	.	.	.	.	.	\$80 00
Watchman	.	.	.	.	.	25 55
Lumber	.	.	.	.	.	15 70

121 25

[See "Reconstruction of Bridges," for balance
of expense.]**Boylston-street bridge** (over Boston & Al-
bany Railroad).Sheathed the bridge, patched sheathing and painted
all iron work.

Carpenters	.	.	.	.	.	\$56 45
Painters	.	.	.	.	.	603 34
Lumber and nails	.	.	.	.	.	172 14
Paint stock	.	.	.	.	.	90 19
Teaming	.	.	.	.	.	10 00

932 12

Broadway bridge (over Boston & Albany
Railroad).Patched sheathing six different times, patched
deck and border.

Carpenters	.	.	.	.	.	\$88 52
Lumber	.	.	.	.	.	137 15
Nails	.	.	.	.	.	3 60

229 27

Central-avenue bridge (from Dorchester to
Milton, over Neponset river).

Patched deck, sheathing and sidewalk.

Carpenters	.	.	.	.	.	\$73 15
Lumber	.	.	.	.	.	32 87

106 02

Carried forward,

\$4,084 47

Brought forward,

\$4,084 47

Columbus-avenue bridge (over Boston & Albany Railroad).

New deck and sheathing, westerly side, patched deck and sheathing, laid new sidewalk in part on easterly side, and painted beams under roadways and easterly sidewalk.

Carpenters	.	.	.	.	.	\$171 50
Painters	.	.	.	.	.	161 75
Lumber	.	.	.	.	.	50 21
Paint stock	.	.	.	.	.	23 10

406 56

Cottage Farm bridge (over Boston & Albany Railroad at Commonwealth avenue).

Painted bridge.

Painters	.	.	.	.	.	\$125 00
Paint stock	.	.	.	.	.	18 00

143 00

Cottage-street [foot] bridge (over flats, East Boston).

Patched sidewalk and painted house.

Bridge-tender	.	.	.	.	.	\$728 00
Carpenters	.	.	.	.	.	95 85
Painters	.	.	.	.	.	8 00
Lumber and nails	.	.	.	.	.	39 86
Coal and supplies	.	.	.	.	.	16 27

887 98

Dartmouth-street bridge (over Boston & Albany Railroad and Providence Division of New York, New Haven & Hartford Railroad).

Repaired sidewalk and sheathing.

Carpenters	.	.	.	.	.	\$26 30
Lumber	.	.	.	.	.	4 22

30 52

Dorchester-street bridge (over New York, New Haven & Hartford Railroad, Plymouth Division).

Repairs made by railroad company, the city paying its part, one-fifth

8 20

Everett-street bridge (over Boston & Albany Railroad, Brighton).

Patched sheathing.

Carpenters	.	.	.	.	.	\$10 00
Lumber	.	.	.	.	.	9 44

19 44

Carried forward,

\$5,580 17

<i>Brought forward,</i>		\$5,580 17
Ferdinand-street bridge (over Boston & Albany Railroad).		
Decked and sheathed, repaired sidewalk, and painted ironwork underneath.		
Carpenters	\$275 10	
Painters	381 25	
Watchman	64 65	
Lumber, nails and bolts	296 70	
Paint stock	54 46	
		1,072 16
Huntington-avenue bridge (over Boston & Albany Railroad).		
Patched sheathing.		
Carpenters		7 65
Hyde Park-avenue bridge (over Stony brook, West Roxbury).		
Bolts, washers, etc., used in rebuilding bridge		12 70
Irvington-street [foot] bridge (over New York, New Haven & Hartford Railroad, Providence Division).		
Built new steps and put on safety treads.		
Carpenters	\$117 75	
Lumber	40 32	
Bolts	3 01	
		161 08
Linden Park-street bridge (over Stony brook).		
Paid professional services, accident to boy while repairs were being made, May 27, 1896		
		25 00
Massachusetts-avenue bridge (over Boston & Albany Railroad).		
Sheathed one side and patched the other.		
Carpenters	\$39 40	
Lumber	97 56	
Nails	5 40	
Teaming	10 00	
		152 36
Massachusetts-avenue bridge (over New York, New Haven & Hartford Railroad, Providence Division).		
Sheathed roadways and patched sheathing.		
Carpenters	\$110 18	
Lumber	67 82	
Nails	3 60	
Teaming	10 00	
		191 60
<i>Carried forward,</i>		\$7,202 72

Brought forward,

\$7,202 72

Mattapan bridge (from Dorchester to Milton).

Painted bridge	\$17 50
Paint stock	2 50
Lumber	24

20 24

Milton bridge (from Dorchester to Milton).

Repaired sidewalk.

Carpenters	5 00
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Shawmut-avenue bridge (over Boston & Albany Railroad).

Patched sheathing.

Carpenters	\$8 55
Mortar	14 25
Teaming	10 00

32 80

Spring-street bridge (from West Roxbury to Dedham, over Charles river).

Repaired stone wall.

Pointing stonework	118 75
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Swett-street bridge (east of New York, New Haven and Hartford Railroad, Midland Division).

Sheathed bridge and patched deck and sheathing.

Carpenters	\$146 73
Lumber	212 43
Nails and bolts	10 95

370 11

Swett-street bridge (west of New York, New Haven & Hartford Railroad, Midland Division).

Sheathed, decked, put in new fence and sidewalk and patched sheathing.

Carpenters	\$165 80
Lumber	35 66

201 46

West Fourth-street bridge (over New York, New Haven & Hartford Railroad, Plymouth Division).

Sheathed bridge, repaired sidewalk and patched sheathing.

Carpenters	\$212 52
Lumber	343 83
Nails	12 60

568 95

Carried forward,

\$8,520 03

Brought forward,

\$8,520 03

West Newton-street bridge (over New York,
New Haven & Hartford Railroad, Providence
Division).

Sheathed one side and patched the other, and re-
paired concrete walks.

Carpenters	\$77 05
Lumber	68 91
Paint stock and teaming	9 86
Resurfacing concrete walks	70 85

 226 67

West Rutland square [foot] bridge (over
New York, New Haven & Hartford Railroad,
Providence Division).

Repaired steps.

Carpenters	2 50
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Williams-street bridge (over Stony brook,
West Roxbury).

Patched deck and sheathing.

Carpenters	\$20 95
Lumber	9 96

 30 91

Williams-street culvert (over Stony brook,
West Roxbury).

Sheathed.

Carpenters	\$7 50
Lumber	8 03

 15 53

Sundry expenditures on inland bridges.

Labor, on snow	\$1,288 97
Labor, cleaning bridges	1,276 54
Nails	19 55
Sundry car fares, Boston Elevated Railway Company (mechanics)	100 00
Sundry Street Department tickets, New York, New Haven & Hartford Rail- road Company (mechanics)	11 25

 2,696 31

Congress street, sidewalk, near L-street bridge.

Covered concrete walk with temporary plankwalk.

Carpenters	80 15
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[Work done for Abolishment of grade crossings.]

Carried forward,

 \$11,572 10

<i>Brought forward,</i>		\$11,572 10
Atlantic avenue , near India wharf.		
Repaired sidewalk and fence.		
Carpenters	\$196 20	
Painters	22 50	
		\$218 70
Hecht's wharf , Atlantic avenue.		
Built fender-guard for snow-dump.		
Carpenters		58 15
North End Paving Yard.		
Planked and repaired pier.		
Carpenters		178 75
Ruth street , East Boston.		
Painted fence.		
Painters	\$80 50	
Paint stock	27 97	
		108 47
Work done for Paving Division		564 07
Total expended on inland bridges		\$12,136 17

RECAPITULATION.

*Table showing Expenditures on the Inland Bridges from
February 1, 1898, to January 31, 1899.*

Name of Bridge.	Repairs, Labor, Lumber, Ironwork and Painting.
Albany street	\$166 19
Allston	218 87
Ashland street	86 55
Ashland street (culvert)	201 71
Athens street	2 50
Baker street	36 21
Beacon street (over B. & A. Railroad)	1,065 90
Beech street (culvert)	20 22
Berkeley street (over B. & A. Railroad)	116 57
Berkeley street (over Providence Division)	494 62
Berwick park	222 59
Blakemore street	63 88
Boylston avenue	121 25
Boylston street (over B. & A. Railroad)	932 12
Broadway (over B. & A. Railroad)	229 27
Central avenue	106 02
Columbus avenue	406 56
Cottage Farm	143 00
Cottage street	887 98
Dartmouth street	30 52
Dorchester street	8 20
Everett street	19 44
Ferdinand street	1,072 16
Huntington avenue	7 65
Hyde Park avenue	12 70
Irvington street	161 08
Linden Park street	25 00
Massachusetts avenue (over B. & A. Railroad)	152 36
Massachusetts avenue (over Providence Division)	191 60
Mattapan	20 24
Milton	5 00
Shawmut avenue	32 80
Spring street	118 75
Swett street (east)	370 11
Swett street (west)	201 46
West Fourth street	568 95
West Newton street	226 67
West Rutland square	2 50
Williams street	30 91
Williams street (culvert)	15 53
Sundry expenditures	2,696 31
Work done for Abolishment of grade crossings	80 15
Work done for Paving Division	564 07
Total	<u>\$12,136 17</u>

REGULAR MAINTENANCE EXPENSES AT NORTH AND SOUTH YARDS.

NORTH YARD, DISTRICT No. 1.

Warren Bridge.

Two messengers, watchman and boy . . .	\$2,711 28	
Repairing buildings, painters . . .	55 50	
Tools for carpenters and painters . . .	34 07	
Telephone	82 50	
Gas, water, clock and supplies . . .	88 98	
		\$2,972 33

STABLE, DISTRICT No. 1.

Warren Bridge.

Teamster and hostler	\$1,695 00	
Feed	300 23	
Bay gelding	150 00	
New harness and repairing old ones . . .	97 85	
Horseshoeing	131 50	
Supplies	7 01	
		2,381 59

Total expended, North Yard and Stable . . .	<u>\$5,353 92</u>
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SOUTH YARD, DISTRICT No. 2.

No. 45 Foundry Street.

Two messengers, watchman and lumber measurer	\$3,065 86	
Carpenters, repairing buildings and on traffic account	71 35	
Tools for carpenters and painters . . .	116 81	
Telephone	82 03	
Plumbing	8 10	
Badges for mechanics	12 00	
Coal and supplies	123 38	
		\$3,479 53

STABLE, DISTRICT No. 2.

No. 135 Dorchester Avenue.

Teamster and stable boy	\$1,547 00	
Board and shoeing of horses	2,005 25	
Repairing buggies, wagons and sleighs, . .	497 46	
Veterinary service and clipping horses, . .	102 55	
New harness and repairing old ones . . .	180 25	
Chestnut mare and bay horse	275 00	
Concord wagon, express wagon and sleigh	365 00	
Supplies	66 69	
		5,039 20

Total expended, South Yard and Stable . . .	<u>\$8,518 73</u>
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SPECIAL APPROPRIATIONS.

IN CHARGE OF BRIDGE DIVISION.

Gold-street bridge (over New York, New Haven & Hartford Railroad, Midland Division).

Paid John E. V. Hayden September 21, 1898, under execution of court, damage to estate, change of grade	<u>\$9,328 02</u>
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Transferred from Street Laying-Out Department, widening and extend- ing, loan	\$4,878 92
Engine-house and site, North End	<u>4,449 10</u>

Transferred to Gold-street bridge Jan- uary 31, 1899, ...	<u>\$9,328 02</u>
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Harvard-street bridge, reconstruction (over New York, New Haven & Hartford Railroad, Midland Division).

Widened bridge by building new sidewalk on northerly side.

Carpenters	\$302 91
Painters	<u>33 00</u>

Total expended January 31, 1899	\$335 91
Balance	<u>2,307 89</u>

Appropriation on hand February 1, 1898	<u>\$2,643 80</u>
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RECONSTRUCTION OF BRIDGES.

Beacon-street bridge (over Boston & Albany Railroad).

Completed work on south-westerly roadway, new deck, beams and sheathing, and painted all iron-work.

Carpenters	\$29 75
Lumber and nails	592 12
Paint stock	181 02
Flagman	31 50
Sundry expenses	<u>97 92</u>
	<u>\$932 31</u>

<i>Carried forward,</i>	<u>\$932 31</u>
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<i>Brought forward,</i>		\$932 31
Boylston-avenue bridge (over Stony brook).		
Reconstructed bridge.		
Carpenters	\$183 75	
Lumber and nails	316 48	
Sundry expenses	41 18	
		541 41
[See "Regular appropriation" for balance of expense.]		
Broadway-bridge (over Fort Point channel).		
Repaired pier, fender-guard, and iron fence.		
Pulling old piles on pier; putting in		
new hard pine stringers, capping, etc., \$1,375 24		
Driving piles; planking top of pier and		
repairing fender-guard		491 00
Carpenters	216 70	
Repairing iron fence, etc.	105 40	
		2,188 34
Charles-river bridge (from Boston to Charles-		
town).		
New stage landing for park boats.		
Pulling up guard-rail, putting in hard pine, spruce,		
and building stage landing		200 00
Chelsea bridge [North] (over North channel,		
Mystic river).		
Repairing pier		200 00
Columbus-avenue bridge (over Boston &		
Albany Railroad).		
Decked and sheathed easterly side.		
Carpenters	\$319 67	
Lumber and nails	254 25	
Sundry expenses	78 00	
		651 92
Congress-street bridge (over Fort Point		
channel).		
Repaired deck under roadway and sidewalk, and		
laid new concrete walk. (Begun in 1897.)		
Carpenters	\$1,435 14	
Lumber and nails	731 67	
New concrete walk	377 30	
Sundry expenses	100 24	
		2,644 35
Cornwall-street bridge (over Stony brook).		
Put in new deck, and sheathed the same.		
Completing work begun in 1897.		
Lumber		67 97
<i>Carried forward,</i>		\$7,426 30

Brought forward, \$7,426 30
Elmwood-street bridge (over Stony brook).
 Patched deck, sheathed and repaired sidewalk.
 Completing work begun in 1897.
 Lumber 10 88

Huntington-avenue bridge (over Boston & Albany Railroad).
 Sheathed the bridge.
 Carpenters 50 25
 Lumber and nails 153 62
 Teaming 10 00

 213 87

Hyde Park-avenue bridge (over Stony brook).
 Completed work begun in 1897.
 Taking down and rebuilding bridge wall, \$589 55
 Lumber 430 36

 1,019 91

Keyes-street bridge (over Stony brook).
 Put in new deck, and sheathed the same.
 Completing work begun in 1897.
 Lumber 99 50

Malden bridge (from Charlestown to Everett).
 Repaired pier.
 Hard pine, piles, iron, etc. 770 00

Mt. Washington-avenue bridge (over Fort Point channel).
 New guard rail 450 00

Warren bridge (from Boston to Charlestown).
 New concrete walk on down-stream side, Boston end, 320 98

Winthrop bridge (from Breed's Island to Winthrop).
 Sheathed the bridge.
 Carpenters \$97 75
 Lumber and nails 260 94

 358 69

Total expended January 31, 1899 \$10,670 13
 Balance 945 25

Appropriation on hand February 1, 1898 \$11,615 38

Talbot-avenue bridge.
 Excavating, altering grade, building abutments and bridge, the street passing under the New York, New Haven and Hartford Railroad, Midland Division, as per contract dated October 30, 1897 \$25,000 00

[Appropriation \$25,000.]

AMOUNTS CHARGED TO SPECIAL APPROPRIATIONS IN CHARGE
OF OTHER DIVISIONS.

Congress street, near L-street bridge.

Built temporary wooden covering for protection
of concrete walk.

Lumber	\$118 71
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[Charged to Abolishment of Grade Crossings.]

Cottage Farm bridge (over Boston & Albany
Railroad, at Commonwealth avenue.)

Painted girder and beams under the sidewalk on
northerly side of bridge.

Painters	\$563 89
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[Stock furnished by Bridge Division.]

[Charged to Blue Hill and other avenues.]

Jeffries-point landing.

Use of wharf for public landing at Jeffries Point,
and keeping the same in repair during the year
1898

\$300 00

[Charged to City Council, incidental expenses.]

Ipswich-street bridge.

Third approximate estimate on retain-
ing walls, abutments and piers . \$1,745 65

Use of boring rig, labor and teaming . 38 74

Advertising 11 00

\$1,795 39

[Charged to laying out and construction of high-
ways.]

[See Paving Division for balance of account.]

Award of Committee on Claims.

Award given for damage caused to yacht at Meri-
dian-street bridge

\$50 00

[Charged to Reserved Fund.]

Building coffer-dam at Roxbury Crossing.

Carpenters	\$66 60
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[Charged to Stony-brook Improvement.]

LIST OF BOSTON BRIDGES.

I.—BRIDGES WHOLLY SUPPORTED BY BOSTON.

[In the list those marked with an asterisk (*) are over navigable waters, and are each provided with a draw.]

In charge of Bridge Division.

- Allston, over Boston & Albany Railroad at Cambridge street, Brighton.
 Ashland street, over N. Y., N. H. & H. Railroad, Providence Division, West Roxbury.
 Athens street, over N. Y., N. H. & H. Railroad, Midland Division.
 Baker street, at Brook farm, West Roxbury.
 Beacon street, over outlet to Back Bay Fens.
 Beacon street, over Boston & Albany Railroad.
 Berkeley street, over Boston & Albany Railroad.
 Berkeley street, over N. Y., N. H. & H. Railroad, Providence Division.
 Berwick park (foot-bridge), over N. Y., N. H. & H. Railroad, Providence Division.
 Blakemore street, over N. Y., N. H. & H. Railroad, Providence Division.
 Bolton street, over N. Y., N. H. & H. Railroad, Midland Division.
 Boylston avenue, over Stony brook, West Roxbury.
 Boylston street, over Boston & Albany Railroad.
 * Broadway, over Fort Point channel.
 Broadway, over Boston & Albany Railroad.
 Brookline avenue, over Boston & Albany Railroad.
 Byron street, over Boston, Revere Beach & Lynn Railroad.
 * Charles river, from Boston to Charlestown.
 * Chelsea (South), over south channel, Mystic river.
 * Chelsea street, from East Boston to Chelsea.
 Columbus avenue, over Boston & Albany Railroad.
 * Commercial Point, or Tenean, Dorchester.
 * Congress street, over Fort Point channel.
 Cornwall street, over Stony brook, West Roxbury.
 Cottage Farm, over Boston & Albany Railroad, at Commonwealth avenue.
 Cottage street (foot-bridge), over flats, East Boston.
 Dartmouth street, over Boston & Albany, and Providence Division of N. Y., N. H. & H. Railroad.
 * Dover street, over Fort Point channel.
 Elmwood street (private way), over Stony brook, Roxbury.
 * Federal street, over Fort Point channel.
 Ferdinand street, over Boston & Albany Railroad.
 Florence street, over Stony brook, West Roxbury.

Gold street (foot-bridge), over N. Y., N. H. & H. Railroad, Midland Division.

Huntington avenue, over Boston & Albany Railroad.

Hyde Park avenue, over Stony brook, West Roxbury.

Irvington street (foot-bridge), over N. Y., N. H. & H. Railroad, Providence Division.

Keyes street, over Stony brook, West Roxbury.

* L street, over reserved channel at junction of Congress and L streets.

Leyden street, over Boston, Revere Beach & Lynn Railroad.

Linden Park street, over Stony brook, Roxbury.

* Malden, from Charlestown to Everett.

Massachusetts avenue, over Boston & Albany Railroad.

Massachusetts avenue, over N. Y., N. H. & H. Railroad, Providence Division.

* Meridian street, from East Boston to Chelsea.

* Mt. Washington avenue, over Fort Point channel.

Shawmut avenue, over Boston & Albany Railroad.

Swett street, east of N. Y., N. H. & H. Railroad, Midland Division.

Swett street, west of N. Y., N. H. & H. Railroad, Midland Division.

Texas street, over Stony brook, Roxbury.

* Warren, from Boston to Charlestown.

West Newton street, over N. Y., N. H. & H. Railroad, Providence Division.

West Rutland square (foot-bridge), over N. Y., N. H. & H. Railroad, Providence Division.

Williams street, over Stony brook, West Roxbury.

Winthrop, from Breed's Island to Winthrop.

In charge of Park Department.

Agassiz, in Back Bay Fens.

Arborway, over Stony brook.

Audubon road, over Boston & Albany Railroad.

Bernier street (foot-bridge), in the Riverway.

Boylston street, in Back Bay Fens.

Bridle path, in the Riverway, over Muddy river.

* Castle Island (foot-bridge), from Marine park, South Boston, to Castle Island.

Charlesgate, Back Bay Fens, over Boston & Albany Railroad.

Circuit drive, over Scarboro' pond, in Franklin park.

Commonwealth avenue, in Back Bay Fens.

Ellicott arch, in Franklin park.

Fen, Back Bay Fens.

Forest Hills entrance, in Franklin park.

Leverett pond (foot-bridge), in Leverett park.

Neptune road, over Boston, Revere Beach & Lynn Railroad.

Scarboro' pond (foot-bridge), in Franklin park.

Stony brook, Back Bay Fens.

In charge of Public Grounds Department.

Public Garden (foot-bridge).

II. — BRIDGES OF WHICH BOSTON SUPPORTS THE PART WITHIN ITS LIMITS.

In charge of Bridge Division.

Central avenue, from Dorchester to Milton.

* Chelsea (North), from Charlestown to Chelsea.

* Granite, from Dorchester to Milton.

Mattapan, from Dorchester to Milton.

Milton, from Dorchester to Milton.

* Neponset, from Dorchester to Quincy.

* North Beacon street, from Brighton to Watertown.

Spring street, from West Roxbury to Dedham.

* Western avenue, from Brighton to Watertown.

In charge of Park Department.

Bellevue street, in the Riverway, over Muddy river.

Bernier street (foot-bridge), in the Riverway, over Muddy river.

Brookline avenue, in the Riverway, over Muddy river.

Longwood avenue, from Roxbury to Brookline.

Tremont street, in the Riverway, over Muddy river.

III. — BRIDGES OF WHICH BOSTON PAYS A PART OF THE COST OF MAINTENANCE.

In charge of Bridge Division.

Albany street, over Boston & Albany Railroad.

Chelsea bridge, over Boston & Maine Railroad.

Dorchester street, over N.Y., N.H. & H. Railroad, Plymouth Division.

Everett street, over Boston & Albany Railroad, Brighton.

Harvard street, over N.Y., N.H. & H. Railroad, Midland Division.

West Fourth street, over N.Y., N.H. & H. Railroad, Plymouth Division.

In charge of Commissioners of Cambridge Bridges.

* Cambridge street, from Brighton to Cambridge.

* Canal, from Boston to Cambridge.

* Essex street, from Brighton to Cambridge.

* Harvard, from Boston to Cambridge.

* North Harvard street, from Brighton to Cambridge.

* Prison Point, from Charlestown to Cambridge.

* West Boston, from Boston to Cambridge.

* Western avenue, from Brighton to Cambridge.

IV. — BRIDGES SUPPORTED BY RAILROAD CORPORATIONS.

1st. — Boston & Albany Railroad.

Harrison avenue.
 Market street, Brighton.
 Tremont street.
 Washington street.

2d. — Boston & Maine Railroad, Eastern Division.

Main street.
 Mystic avenue.

3d. — Boston & Maine Railroad, Western Division.

Main street.
 Mystic avenue.

4th. — Boston, Revere Beach & Lynn Railroad.

Everett street.

5th. — New York, New Haven & Hartford Railroad, Midland Division.

Dorchester avenue.
 Morton street, Dorchester.
 Norfolk “ “
 Norfolk “ “
 Silver street.
 Washington street, Dorchester.
 West Broadway.
 West Fifth street.
 West Fourth street.
 West Second street.
 West Sixth street.
 West Third street.

6th. — New York, New Haven & Hartford Railroad, Plymouth Division.

Adams street.
 Ashmont street and Dorchester avenue.
 Cedar Grove Cemetery.
 Freeport street.
 Savin Hill avenue.

7th. — New York, New Haven & Hartford Railroad, Providence Division.

Beech street, West Roxbury.
 Bellevue street, West Roxbury.
 Canterbury street, West Roxbury.
 Centre and Mt. Vernon streets, West Roxbury.
 Dudley avenue, West Roxbury.
 Park street, West Roxbury.

RECAPITULATION OF BRIDGES.

I. Number wholly supported by Boston :		
In charge of Bridge Division	54	
In charge of Park Department	17	
In charge of Public Grounds Department . .	1	
	—	72
II. Number of which Boston supports the part within its limits :		
In charge of Bridge Division	9	
In charge of Park Department	5	
	—	14
III. Number of which Boston pays a part of the cost of maintenance :		
In charge of Bridge Division	6	
In charge of Commissioners of Boston and Cambridge Bridges	8	
	—	14
IV. Number supported by railroad corporations :		
1. Boston & Albany	4	
2. Boston & Maine, Eastern Division . .	2	
3. Boston & Maine, Western Division . .	2	
4. Boston, Revere Beach & Lynn	1	
5. New York, New Haven & Hartford, Midland Division	12	
6. New York, New Haven & Hartford, Plymouth Division	5	
7. New York, New Haven & Hartford, Providence Division	6	
	—	32
Total number		<u>132</u>

**List of Small Bridges or Culverts having Wooden Tops, which are repaired by Bridge Division. — Walls
Repaired and Openings cleaned by Sewer Division.**

LOCATION.	Span, <i>Feet.</i>	Height of Opening <i>Feet.</i>	Length, <i>Feet.</i>	Side-walls.	Covering.
Ashland street and Canterbury, near Calvary Cemetery, West Roxbury.	7.6	5.5	75	Stone.....	Wood.
Beech street, near Anawan avenue, at Central station, West Roxbury.	4.0	4.0	50	Stone.....	Wood.
Cass street, near Spring-street station, West Roxbury	7.0	3.0	21	Stone.....	Wood.
Cohasset street, Roslindale.....	14.0	7.5	60	Stone.....	Wood.
Gardner street, near Cow Island, West Roxbury.....	5.0	5.5	33	Wood.....	Wood.
Jamaica street, Jamaica Plain.....	10.0	4.0	39	Stone.....	Wood.
Park street, west of Dorchester avenue, Dorchester	5.0	3.7	50	Stone.....	Wood.
Park street, west of N.Y., N.H. & H. Railroad, Dorchester	8.5	5.0	50	Stone.....	Wood.
Powell street, near Spring-street station, West Roxbury.....	12.0	3.0	65	Stone.....	Wood.
Spring street, near Spring-street station, West Roxbury.....	2.7	2.7	63	Stone.....	Wood.
Summer street, near Spring-street station, West Roxbury	4.0	4.5	40	Stone.....	Wood.
Williams street, at Stony brook, West Roxbury	5.0	5.0	50	Wood.....	Wood.
Woodman street, Jamaica Plain	6.3	4.0	65	Stone.....	Wood.

PUBLIC LANDING PLACES.

The following public landing-places have been built by the city, and are maintained and controlled by the Street Department :

Charles-river Bridge.—Size, 40 × 60. Built in 1890. Moored from city's property.

Essex-street Bridge.—Size, 9 × 23. Built in 1890. Moored from city's property.

East Boston, Public Landing.—Size, 18 × 30. Built in 1893. Moored at dock of East Boston Dry Dock Company. Dock and flats leased at \$250 per year.

Commercial Wharf.—Size, 30 × 50. Built by M. F. Sullivan; contract dated January 1, 1892. Moored at dock of Commercial Wharf Corporation. Dock and flats leased November 30, 1891, at \$1,000 per year.

Federal-street Bridge.—Size, 20 × 30. Built by M. F. Sullivan, October 26, 1892. Moored from city's property.

Jeffries' Point, East Boston.—Size, 20 × 50. Moored from Fitzpatrick's Wharf; \$300 per year.

CABLE-HOUSES AND BOXES.

The following is a list of cable-houses and boxes on bridges in charge of this division :

New England Telephone and Telegraph Company :

Charles-river bridge, 2 houses, 1 unused box.

Chelsea [South] bridge, 1 house.

Congress-street bridge, 2 houses.

Dover-street bridge, 2 houses or boxes.

Chelsea [North] bridge, 1 box.

Chelsea-street bridge, 1 box.

Malden bridge, 4 boxes.

Meridian-street bridge, 2 boxes.

Neponset bridge, 2 boxes on poles.

Warren bridge, 2 boxes.

American Telephone and Telegraph Company :

Federal-street bridge, 1 house.

Merchants' Telegraph Company :

Congress street bridge, 2 boxes.

Postal Telegraph Cable Company :

Congress-street bridge, 2 houses.

Malden bridge, 2 boxes.

Warren bridge, 2 boxes.

Boston Electric Light Company :

Congress-street bridge, 2 boxes.

Lynn & Boston Railroad Company :

Chelsea [North] bridge, 4 boxes.

Chelsea [South] bridge, 8 boxes.

West End Street Railway Company :

Cambridge-street bridge, 1 house.

Dover-street bridge, 1 house, 1 box.

Federal-street bridge, 2 houses.

Malden bridge, two houses.

Warren bridge, 2 houses.

Boston Police Department :

Chelsea [South] bridge, 1 box.

Malden bridge, 2 boxes.

Boston Fire Department :

Chelsea [North] bridge, 1 box.

Dover-street bridge, 1 house, 1 box.

Meridian-street bridge, 2 boxes.

Warren bridge, 2 boxes.

On Warren bridge there are also five small boxes ; the owners of the same are unknown.

**Statement of Traffic on Monday, October 24, 1898, between
the hours of 6 A.M. and 7 P.M.**

North Bridges.

NAME OF BRIDGE.	Foot passengers from Boston.	Foot passengers to Boston.	Teams from Boston.	Teams to Bos- ton.	Street cars from Boston.	Street cars to Boston.
Charles river.....	5,830	4,619	1,673	1,540		
Chelsea (North).....	1,019	1,065	803	915	366	392
Chelsea (South).....	1,190	1,237	837	877	369	392
Malden.....	840	943	835	932	299	343
Meridian street.....	1,156	1,180	464	478	108	113
Warren.....	5,049	5,367	3,597	3,858	1,282	1,323

South Bridges.

Broadway.....	5,100	7,365	2,160	2,700	290	380
Congress street.....	7,050	7,405	4,089	4,455		
Dover street.....	4,525	4,560	920	972	165	170
Federal street.....	1,729	1,038	976	763	239	245
Mt. Washington avenue.....	1,710	1,455	644	719		

DRAW-TENDERS' REPORTS.¹

Giving the Number of Vessels passing through the Drawbridges controlled by the City of Boston, from February 1, 1898, to January 31, 1899.

NAME OF BRIDGE.	STEAMERS.			SAILING VESSELS.			TUGS.			ALL OTHERS.			TOTAL NUMBER OF VESSELS.			Total Number of Carries.	Total Number of Openings.
	By Day.	By Night.	Total.	By Day.	By Night.	Total.	By Day.	By Night.	Total.	By Day.	By Night.	Total.	By Day.	By Night.	Total.		
Broadway	9	4	13	1,744	659	2,403	2,645	390	3,035	1,041	195	1,236	5,439	1,248	6,687	1,745	4,362
Cambridge street *				29		29	238	18	256	194	16	210	461	34	495	109	262
Charles river.....	30	4	34	1,534	477	2,011	3,893	860	4,753	2,358	554	2,912	7,815	1,895	9,710	2,443	6,416
Chelsea (North).....	76	23	99	1,022	221	1,243	6,148	1,744	7,892	3,489	1,259	4,748	10,735	3,247	13,982	2,541	8,828
Chelsea (South).....	38	1	39	1,128	69	1,197	3,033	167	3,200	1,081	39	1,120	5,280	276	5,556	1,388	4,035
Chelsea street.....				11	1	12	116	3	119	49		49	176	4	180	25	139
Commercial point.....																	
Congress street	64	6	70	2,640	781	3,421	7,166	1,252	8,418	2,824	472	3,296	12,694	2,511	15,205	2,691	8,317
Dover street	7	3	10	1,525	563	2,088	2,099	335	2,434	792	164	956	4,423	1,125	5,548	1,597	3,965
Essex street *	1	1	2	30	1	31	253	26	279	135	10	145	419	38	457	64	284
Federal street.....	12	3	15	1,800	749	2,549	3,136	628	3,764	1,260	273	1,533	6,208	1,653	7,861	1,990	5,642
Granite.....				48		48	238	1	239	71		71	357	1	358	61	222
L street		2	2	435	121	556	1,898	302	2,200	1,263	293	1,556	3,596	718	4,314	557	2,004
Malden.....	2		2	253	19	272	1,238	140	1,378	815	120	935	2,308	279	2,587	562	1,580

Meridian street	48	10	58	500	33	533	4,364	1,065	5,429	2,568	631	3,199	7,480	1,739	9,219	2,175	5,656
Mt. Washington avenue	61	8	69	2,177	680	2,857	5,370	824	6,194	2,262	393	2,655	9,870	1,905	11,775	2,643	6,533
Neponset				47	1	48	250	8	258	77	2	79	374	11	385	59	244
North Beacon street										2		2	2		2		2
North Harvard street *				23	1	24	183	13	196	236	15	251	442	29	471	121	202
Warren	31	5	36	1,274	560	1,834	2,653	685	3,338	1,568	503	2,071	5,526	1,753	7,279	1,871	4,796
Western avenue to Cambridge *				26		26	200	14	214	172	13	185	338	27	425	96	217
Western avenue to Watertown							144	4	148	57		57	201	4	205	28	149
Totals	379	70	449	16,246	4,936	21,182	45,265	8,539	53,804	22,314	4,952	27,266	84,204	18,497	102,701	22,766	63,875

¹ West Boston, Prison Point, Canal (or Craigie's), and Harvard bridges, not included in these tables, being in the care of commissioners representing the two cities (Boston and Cambridge) connected by these bridges.

* Western avenue to Cambridge, Essex street, North Harvard street, and Cambridge street bridges were placed in charge of same commissioners on July 1, 1898, and figures are for five months only.

Table showing the Widths of Openings for Vessels in all Bridges provided with Draws in the City of Boston, 1899.

NAME OF BRIDGE.	Location.	Number of Openings.	Width.
Boston & Maine R.R., Eastern Division	Boston to Charlestown.....	1	39 feet 7 inches.
Boston & Maine R.R., Eastern Division	Over Miller's river.....	1	35 " 6 "
Boston & Maine R.R. (freight), Southern Division.....	Boston to East Cambridge	1	40 " 2 "
Boston & Maine R.R. (passenger), Southern Division	" "	1	39 " 7 "
Boston & Maine R.R., Western Division	Boston to Charlestown.....	1	39 " 7 "
Boston & Maine R.R., Western Division	Over Miller's river.....	1	35 " 10 "
Broadway	Over Fort Point channel..	1	43 " 3 "
Cambridge street.....	Brighton to Cambridge....	1	36 " 4 "
Canal (or Craigie's).....	Boston to East Cambridge.	1	36 " 0 "
Charles river....	Boston to Charlestown....	1	36 " 0 "
Chelsea (south channel)	Charlestown to Chelsea ...	1	38 " 9 "
Chelsea (north channel).....	" "	1	44 " 10 "
Chelsea st. (East Boston side)....	East Boston to Chelsea....	2	36 " 0 "
Chelsea street(Chelsea side)	" "	..	36 " 0 "
Commercial Point (or Tenean)...	Dorchester	1	24 " 0 "
Congress street (Boston side)....	Over Fort Point channel..	2	43 " 3 "
" South Boston side....	" "	..	43 " 9 "
Dover street	" "	1	37 " 0 "
Essex street.....	Brighton to Cambridge....	1	36 " 0 "
Federal street.....	Over Fort Point channel..	1	41 " 10 "
Fitchburg R.R.....	Boston to Charlestown....	1	36 " 0 "
Fitchburg R.R. (for teaming freight).....	" "	1	36 " 0 "
Grand Junction R.R.....	Brighton to Cambridge....	1	36 " 0 "
" "	East Boston to Chelsea	1	34 " 6 "
Granite	Dorchester to Milton.....	1	36 " 0 "
Harvard (Boston side).....	Boston to Cambridge.....	2	36 " 6 "
" (Cambridge side).....	" "	..	36 " 10 "
L street	Over Reserved channel, South Boston	1	40 " 0 "
Malden.....	Charlestown to Everett....	1	43 " 4 "

Table showing Width of Openings, etc. — *Concluded.*

NAME OF BRIDGE.	Location.	Number of Openings.	Width.
Meridian st. (East Boston side) ..	East Boston to Chelsea ...	2	59 feet 2 inches.
“ (Chelsea side)	“ “	..	59 “ 0 “
Mt. Washington avenue (Boston side).....	Over Fort Point channel ..	2	42 “ 2 “
Mt. Washington avenue (South Boston side).....	“ “	..	42 “ 3 “
Neponset.....	Dorchester to Quincy.....	1	36 “ 0 “
New England R.R.	Over South Bay.....	1	28 “ 4 “
North Beacon street	Brighton to Watertown ...	1	30 “ 3 “
North Harvard street.....	Brighton to Cambridge ...	1	36 “ 0 “
New York, New Haven & Hartford R.R.	Over Fort Point channel..	1	36 “ 3 “
New York, New Haven & Hartford R.R.	Dorchester to Quincy.....	1	35 “ 10 “
Prison Point.....	Charlestown to Cambridge	1	36 “ 0 “
Summer street (building).....	Over Fort Point channel..	1	
Warren	Boston to Charlestown ...	1	36 “ 0 “
West Boston (Boston side).....	Boston to Cambridge.....	2	35 “ 6 “
“ (Cambridge side) ..	“ “	..	36 “ 6 “
Western avenue	Brighton to Cambridge... ..	1	36 “ 0 “
“	Brighton to Watertown ...	1	35 “ 10 “

Table showing Width of Bridges, kind of Roadways, Sidewalks, etc., on Tide-water Bridges, 1898.

NAME OF BRIDGE.	Width of Bridge.	ROADWAY.		SIDEWALKS.		
		Width.	Kind of Roadway.	No.	Width.	Kind of Walks.
	<i>Ft. In.</i>	<i>Ft. In.</i>			<i>Ft. In.</i>	
Broadway.....	60 0	40 0	Plank	2	10 0	Coal-tar concrete.
Cambridge street	40 0	32 9	"	1	6 0	Plank.
Canal	64 0	48 0	Paved	2	8 0	Brick.
Charles river.....	50 0	34 0	"	2	8 0	"
Chelsea, North	49 0	40 0	"	1	8 0	Coal-tar concrete and plank.
" South	50 3	41 2	"	1	8 0	Plank.
" street	30 0	23 2	Plank	1	6 0	"
Commercial point.....	about 34 0	about 27 0	"	0		
Congress street	60 0	44 0	Paved.....	2	8 0	Coal-tar concrete.
Dover st. (over water)	60 0	40 0	"	2	10 0	Asphalt.
Essex street.....	31 0	22 8	Plank	1	7 6	Plank.
Federal street.....	69 0	49 0	Paved	2	10 0	Asphalt.
Granite	30 2	24 4	Plank	1	5 0	Plank.
Harvard.....	69 4	51 0	"	2	9 2	Asphalt.
L street.....	60 0	44 0	Paved.....	2	8 0	"
Malden.....	40 0	32 0	"	1	7 0	Coal-tar concrete.
Meridian street	50 0	36 0	"	2	7 0	" "
Mt. Washington ave...	61 0	39 6	"	2	10 9	" "
Neponset.....	30 0	23 10	Plank	1	5 5	Plank.
North Beacon street...	31 0	25 2	"	1	5 0	"
North Harvard street.	28 2	26 7	"	0		
Prison Point.....	50 0	36 0	{ Plank part } { Paved part }	2	7 0	Coal-tar concrete.
Warren	80 0	60 0	Paved	2	10 0	" "
Western ave. to Cambridge.....	33 2	26 3	Plank	1	6 0	Plank.
Western ave. to Watertown	33 0	24 2	"	1	8 0	"
Winthrop	24 2	19 10	"	1	3 7	"
West Boston.....	50 0	36 0	Paved	2	7 0	Brick.

DRAW-TENDERS' REPORTS.¹

Giving the Number of Vessels passing through the Drawbridges controlled by the City of Boston during the Years 1894, 1895, 1896, 1897 and 1898.

NAME OF BRIDGE.	STEAMERS.					SAILING VESSELS.					TUGS.					ALL OTHERS.					TOTAL NUMBER OF VESSELS.					TOTALS. Feb. 1, 1894 to Feb. 1, 1899.
	1894.	1895.	1896.	1897.	1898.	1894.	1895.	1896.	1897.	1898.	1894.	1895.	1896.	1897.	1898.	1894.	1895.	1896.	1897.	1898.	1894.	1895.	1896.	1897.	1898.	
Broadway.....	6	16	22	8	13	2,800	3,115	3,082	2,495	2,403	1,435	2,279	2,358	3,507	3,035	795	816	890	1,209	1,236	5,536	6,226	6,352	7,719	6,687	32,520
Cambridge street..	...	...	...	...	...	109	150	133	125	29	523	599	572	710	256	205	181	217	396	210	837	930	922	1,251	495	4,415
Charles river.....	34	45	39	48	34	2,503	2,815	2,857	2,576	2,011	2,942	3,641	4,121	4,257	4,753	2,271	2,492	2,534	2,926	2,912	7,750	8,993	9,551	9,807	9,710	45,811
Chelsea (North)...	66	115	159	93	99	1,141	995	1,169	978	1,243	3,841	4,692	4,373	5,186	7,892	1,631	2,383	2,229	2,799	4,748	6,679	8,155	7,930	9,056	13,982	45,802
Chelsea (South)...	51	31	39	46	39	850	847	1,260	1,345	1,197	1,810	2,275	2,748	3,373	3,200	1,083	984	914	993	1,120	3,794	4,137	4,961	5,757	5,556	24,205
Chelsea street....	6	...	6	...	...	57	24	30	19	12	159	105	163	138	119	116	41	105	80	49	338	170	304	237	180	1,229
Commercial Point,	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	3
Congress street....	277	383	292	113	70	4,080	4,174	4,264	4,318	3,421	7,626	7,886	8,347	9,745	8,418	2,850	2,838	3,059	3,541	3,296	14,833	15,281	15,962	17,717	15,205	78,998
Dover street.....	6	16	20	6	10	2,355	2,894	2,871	2,813	2,088	1,557	1,999	2,146	3,009	2,494	711	712	741	975	956	4,029	5,621	5,778	6,803	5,548	28,379
Essex street.....	4	...	4	1	2	134	158	238	174	31	639	721	685	788	279	244	242	295	422	145	1,021	1,121	1,222	1,385	457	5,206
Federal street ...	6	16	17	6	15	3,017	3,366	3,333	3,199	2,549	2,261	2,656	2,941	4,025	3,704	816	848	1,083	1,226	1,533	6,100	6,896	7,434	8,456	7,861	36,747
Granite street.....	...	...	...	...	...	82	126	64	58	48	220	306	240	258	239	37	41	55	63	71	339	473	359	379	358	1,908
L street.....	4	2	18	4	2	678	541	730	673	556	2,754	3,132	2,556	2,066	2,200	1,535	2,128	1,219	1,556	4,971	5,803	4,432	3,962	4,314	23,482	

¹ West Boston, Prison Point, Canal (or Craigie's) and Harvard Bridges not included in these tables, being in the care of commissioners representing the two cities (Boston and Cambridge) connected by these bridges.

DRAW-TENDERS' REPORTS. — *Concluded.*

NAME OF BRIDGE.	STEAMERS.				SAILING VESSELS.				TUGS.				ALL OTHERS.				TOTAL NUMBER OF VESSELS.				TOTALS.
	1894.	1895.	1896.	1897.	1898.	1894.	1895.	1896.	1897.	1898.	1894.	1895.	1896.	1897.	1898.	1894.	1895.	1896.	1897.	1898.	
Malden.....	8	2	4	2	2	360	273	352	450	272	1,226	1,619	1,384	1,652	1,378	574	1,236	961	1,059	985	13,749
Meridian street....	47	38	51	57	58	846	818	653	610	533	4,080	4,046	4,391	4,145	5,429	2,088	2,031	1,954	2,464	3,199	37,508
Mt. Washington avenue.....	87	69	88	74	69	3,432	3,699	3,700	3,786	2,897	4,782	5,119	5,426	6,443	6,104	2,246	2,229	2,304	2,509	2,655	57,768
Neponset.....	...	...	...	...	...	105	148	66	57	48	224	306	250	254	258	40	47	60	66	79	2,008
No. Beacon street,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
No. Harvard street,	...	...	...	...	...	64	96	92	80	24	168	224	279	672	196	36	35	72	988	251	3,277
Warren.....	63	47	42	41	36	2,081	2,312	2,320	2,476	1,894	2,124	2,588	3,007	2,981	3,338	1,699	2,007	2,143	1,766	2,671	34,976
Western avenue to Cambridge.....	2	...	...	...	...	35	115	114	103	26	426	485	451	565	214	153	136	158	332	185	3,560
Western avenue to Watertown.....	...	...	...	...	...	7	...	36	7	...	28	7	102	108	148	20	7	45	58	57	630
Totals.....	667	800	801	499	449	24,737	26,666	27,424	26,842	21,182	39,275	44,665	46,540	53,882	53,804	19,151	21,434	20,947	25,032	27,266	482,183

Note.—Western avenue to Cambridge, Essex street, North Harvard street and Cambridge street bridges were placed in charge of same commissioners on July 1, 1898, and 1898 figures are for five months only.

APPENDIX B.

REPORT OF THE DEPUTY SUPERINTENDENT OF
THE FERRY DIVISION.

NORTH FERRY, EAST BOSTON, February 1, 1899.

MR. BENJ. W. WELLS,

Superintendent of Streets :

DEAR SIR, — I respectfully submit the annual report of the expenditures, income and operation of the Ferry Division of the Street Department for the financial year ending January 31, 1899.

South Ferry, East Boston side, located at the termination of Lewis street, covers an area of 58,725 square feet of land and water. On these premises are one head-house, one coal-shed, one work-shop for carpenters, machinists and blacksmith, one gate-room and oil-room, all in very poor condition; three piers, which form the two ferry-slips, two drops and tanks, and one dock, where boats are laid when not in use or while undergoing repairs.

South Ferry, Boston side, located at the termination of Eastern avenue, covers an area of 28,135 square feet of land and water, upon which are one head-house, with canopies extending over driveways, one gate-room, three piers, which form the two slips, and two drops and tanks.

The wharf property adjoining these premises was leased by the East Boston Ferry Company April 30, 1853, for 999 years, at a rental of \$4,000 per year, which lease was assigned to the Ferry Department. This entire wharf is sub-let to the Public Institutions Department for \$2,000 per year, making a net loss to this division of \$2,000 per year, which should be borne by the Public Institutions Department.

North Ferry, Boston side, located at the termination of Battery street, covers an area of 45,000 square feet of land and water, upon which are one head-house, with canopies, one gate-room and steam-room, three piers, which form the two slips, and two drops and tanks.

North Ferry, East Boston side, located at the termination of Border street, covers an area of 62,138 square feet of land and water, upon which are one head-house, with canopy, boiler-room, oil-room, stable and coal-shed, three piers, which form the two slips, two drops and tanks.

There are eight drops. Two new drops and tanks have been put in the past year—one at North Ferry, Boston side, and the other at South Ferry, East Boston side—thus making all the drops practically new, so that no more will be required for at least twenty years. There are twelve piers. Two of them have been stripped and planked the past year at a cost of about \$4,200.

The rest are in fair condition, with the exception of south pier, North Ferry, Boston side, which should be entirely rebuilt.

The landings and head-houses are in good condition, with the exception of South Ferry, East Boston side, which is in a deplorable state. The coal-shed at this place is in a very dangerous condition, so much so that we are unable to store coal in it any longer. It is imperative that something be done with this landing before long.

During the past year the ferry-boat "Revere" has been hauled out on railway, and stripped and calked, at a cost of about \$1,000. Owing to her age it was deemed advisable not to copper her.

One new propeller ferry-boat, the "Governor Russell," was built the past year, but was sold to the United States Government, being required for war purposes, for the sum of \$71,000, before she could be given her trial trip. The propeller ferry-boat "East Boston" was also sold to the government for the sum of \$57,500.

A contract was made for a new ferry-boat, which is now building, and should be completed by the middle of February; and another new boat must also shortly be contracted for, unless one of the boats sold to the government is to be repurchased.

Respectfully yours,

WILLIAM F. McCLELLAN,

Deputy Superintendent.

FINANCIAL STATEMENT.

REGULAR ANNUAL AND SPECIAL APPROPRIATIONS OF STREET DEPARTMENT, FERRY DIVISION, FOR YEAR ENDING JANUARY 31, 1899.

Appropriation for year ending January 31, 1899	\$220,000 00
Amount of expenditures	\$213,055 79
Amount transferred to Sanitary Division	6,944 21
	<u>\$220,000 00</u>

OBJECTS OF EXPENDITURE.

Salaries and wages for maintenance	\$128,590 40
Salaries and wages for repairs	17,812 29
Current expenses	17,209 58
Fuel	29,955 00
Supplies for maintenance	5,178 49
Supplies for repairs	4,073 14
Repairs on boats	8,223 00
Repairs on buildings, piers and drops	901 55
Damages to persons and property	76 82
Tools and fixtures	431 73
Incidental expenses	603 79
	<u>\$213,055 79</u>
Unexpended balance transferred to Street Department, Sanitary Division	6,944 21
	<u>\$220,000 00</u>

SPECIAL APPROPRIATIONS.

Appropriation authorized for new ferry-landings, head-house, new boats, slips and drops	<u>\$500,000 00</u>
Amount issued during year ending January 31, 1897	\$30,000 00
Amount issued during year ending January 31, 1898	112,800 00
Amount issued during year ending January 31, 1899	26,000 00
Total amount issued	<u>\$168,800 00</u>

OBJECTS OF EXPENDITURES.

Amount expended as per annual report of 1896	\$21,961 61
Amount expended as per annual report of 1897	44,180 33
Amount expended during 1898	77,251 55

Total amount expended to February 1, 1899	\$143,393 49
Unexpended balance of amount issued	25,406 51

\$168,800 00

Amount authorized but not issued, New Ferry- Landing Loan	331,200 00
--	------------

\$500,000 00

Amount expended during past year as above	\$77,251 55
---	-------------

William McKie, on contract, and R. F. Keough, for plans and specifications, for double-screw ferry-boat "Gov. Russell"	\$52,217 01
---	-------------

John M. Brooks, for building two new drops and tanks	13,493 78
---	-----------

W. H. Ellis & Co., for rebuilding slips and piers	1,750 00
--	----------

Maginnis, Walsh & Sullivan, on ac- count new head-house, South Ferry, East Boston	1,000 00
---	----------

Sundry bills for labor and material fur- nished during the year	8,790 76
--	----------

\$77,251 55

Appropriation for installing electric lights on ferry- boats	\$8,000 00
---	------------

Amount expended as per annual report of 1897	\$5,862 88
---	------------

Electric installation on ferry-boat "D. D. Kelly"	2,137 12
--	----------

\$8,000 00

Appropriation for building new ferry-boats	\$128,500 00
--	--------------

OBJECTS OF EXPENDITURE.

William McKie, on contract for building double- screw ferry-boat Number 3, "Noddle Island"	\$48,000 00
---	-------------

R. F. Keough, for superintending construction of double-screw ferry-boat Number 3	1,050 00
--	----------

Carried forward, \$49,050 00

<i>Brought forward,</i>	\$49,050 00
Deane Steam Pump Co., on account of four steam-pumps for ferry-boat Number 3	1,000 00
Sundry bills incurred in course of construction	296 14
Bill of specifications for double-screw ferry-boat Number 3	117 46
Total amount expended	\$50,463 60
Appropriation unexpended	78,036 40
	<u>\$128,500 00</u>

TOTAL APPROPRIATIONS.

Annual maintenance	\$220,000 00
New ferry-landing loan	500,000 00
Installation electric lights on boats	8,000 00
New ferry-boats	128,500 00
	<u>\$856,500 00</u>

TOTAL EXPENDITURES.

Annual maintenance	\$213,055 79
New ferry-landing	143,393 49
Installation electric lights on boats	8,000 00
New ferry-boats	50,463 60
	<u>\$414,912 88</u>
Transfer to Sanitary Division	6,944 21
	<u>421,857 09</u>
	<u>\$434,642 91</u>

UNEXPENDED.

New ferry-landing	\$356,605 51
New ferry-boats	78,036 40
	<u>\$434,642 91</u>

INCOME.

Cash Receipts from February 1, 1898, to February 1, 1899.

From Tollmen :	
For 11,737,776 foot-passengers, at 1 cent	\$117,377 76
sales of strip team tickets	25,478 50
From Gatemen :	
For 298,085 foot-passengers, at 1 cent	2,980 85
cash ferriage for teams	14,152 26
At office of City Collector :	
From sale of ferry-boat "Gov. Russell"	71,000 00
sale of ferry-boat "East Boston"	57,500 00
<i>Carried forward,</i>	<u>\$288,489 37</u>

<i>Brought forward,</i>			\$288,489 37
From sales of foot-passes			381 00
sales of strip team tickets			63 00
rents			2,740 00
free ferries, July 4, 1898			25 00
At Ferry Division office :			
From sales of foot-passes			1,007 50
sales of strip team tickets			613 00
sales of old material			97 70
boat privileges to bootblacks			52 00
cash with gatemen as capital turned in			33 00
Total receipts for year			<u>\$293,501 57</u>
From sale of ferry-boats	\$128,500 00		
regular ferry income	165,001 57		
			<u>\$293,501 57</u>

STATEMENT SHOWING RECEIPTS AT EACH FERRY.

North Ferry.

From Tollman.	Foot-Passengers.	Team Tickets.	Total.
No. 2.....	\$12,229 23	\$1,864 00	\$14,093 23
" 3.....	12,154 17	1,971 00	14,125 17
" 5.....	12,271 53	2,002 00	14,273 53
" 6.....	12,007 22	1,948 00	13,955 22
" 9.....	12,028 40	1,951 00	13,979 40
" 10.....	11,968 35	1,883 50	13,851 85
" 13.....	12,107 95	1,858 00	13,965 95
	<u>\$84,766 85</u>	<u>\$13,477 50</u>	<u>\$98,244 35</u>

From Tollmen	\$98,244 35
From Gatemen :	
For 191,194 foot-passengers, at 1c.,	\$1,911 94
cash fares for teams	6,479 73
	<u>8,391 67</u>
Total at North Ferry	<u>\$106,636 02</u>

South Ferry.

From Tollman.	Foot-Passengers.	Team Tickets.	Total.
No. 1.....	\$7,670 10	\$3,173 00	\$10,843 10
" 4.....	7,614 27	2,800 00	10,414 27
" 7.....	7,838 89	2,909 50	10,748 39
" 8.....	7,320 51	2,921 50	10,242 01
" 11.....	952 49	101 50	1,053 99
" 12.....	1,214 65	95 50	1,310 15
	<u>\$32,610 91</u>	<u>\$12,001 00</u>	<u>\$44,611 91</u>

From Tollmen \$44,611 91

From Gatemmen :

For 106,891 foot-passengers, at 1c., \$1,068 91

cash fares for teams . . . 7,672 53

8,741 44

Total at South Ferry \$53,353 35

North and South ferries, as above . . . \$159,989 37

Tickets paid for at office of City Collector . . . 444 00

Tickets paid for at office of Ferry Division . . . 1,620 50

Free ferries, July 4, 1898 25 00

Total income from ferriages \$162,078 87

Sales of ferry-boats 128,500 00

Rents 2,740 00

Old material, bootblack privileges, and gatemmen's
cash capital turned in 182 70

Total cash receipts, as above \$293,501 57

CASH STATEMENT.

From February 1, 1898, to February 1, 1899.

Dr.

To cash received \$293,501 57

Cr.

By amount paid City Collector . . . \$293,496 15

Amount of rejected coin 5 42

\$293,501 57

STATEMENT OF RECEIPTS.

From April 1, 1870 (date of purchase by the City of Boston, of the East Boston Ferries), to February 1, 1899.

Cash received for tolls from April 1, 1870, to February 1, 1895 .	\$4,081,824 68	
Cash received for tolls from February 1, 1895, to February 1, 1896	166,307 33	
Cash received for tolls from February 1, 1896, to February 1, 1897	163,769 67	
Cash received for tolls from February 1, 1897, to February 1, 1898	168,083 88	
Cash received for tolls from February 1, 1898, to February 1, 1899	162,078 87	
		\$4,742,064 43
Cash received for rent	\$47,651 30	
Cash received for old boats	72,746 71	
Cash received for one new boat	71,000 00	
Cash received from all other sources	10,070 01	
		201,468 02
Total receipts in 28 years 10 months		\$4,943,532 45

CASH STATEMENT.

From April 1, 1870, to February 1, 1899.

Dr.

To receipts from all sources in 28 years 10 months	\$4,943,532 45
--	----------------------------

Cr.

By amount paid to City Collector, \$4,942,881 35	
By cash with tollmen as capital	575 00
By counterfeit and rejected money in 28 years 10 months	76 10
	\$4,943,532 45

EXPENDITURES.

From March 4, 1857, to April 1, 1870.

Amount charged to the East Boston Ferries by Auditor previous to purchase :

For avenues . . . \$250,000 00

For repairs . . . 65,815 68

\$315,815 68

For ferry property purchased

April 1, 1870 276,375 00

\$592,190 68

Amount of expenditure from April

1, 1870, to February 1, 1895 . \$5,688,363 40

Amount of expenditure from Feb-

ruary 1, 1895, to February 1,

1896 221,813 94

Amount of expenditure from Feb-

ruary 1, 1896, to February 1,

1897 241,057 70

Amount of expenditure from Feb-

ruary 1, 1897, to February 1,

1898 270,043 21

Amount of expenditure from Feb-

ruary 1, 1898, to February 1,

1899 342,908 06

6,764,186 31

\$7,356,376 99

DEDUCT.

Amount paid to City Treasury 4,942,881 35

Net cost of ferries to city to date, not including

interest on loans \$2,413,495 64STATEMENT SHOWING THE ACTUAL STANDING OF FERRY DIVISION,
STREET DEPARTMENT, WITH THE CITY OF BOSTON, FEBRUARY
1, 1899.*Dr.*

Amount paid previous to April 1, 1870 . . . \$592,190 68

Amount paid from April 1, 1870, to February 1,

1899, as follows :

Eight ferry steamers 447,773 05

New buildings, piers and drops 433,218 35

Fuel 978,215 01

Repairs of all kinds 684,753 69

Carried forward,

\$3,136,150 78

<i>Brought forward,</i>	\$3,136,150 78
Salaries and wages	3,234,092 63
Tools and fixtures	13,716 49
Land from Lincoln's Wharf in 1887	5,562 52
Land from Battery Wharf in 1893	10,000 00
All other expenses	956,854 57
	\$7,356,376 99

Cr.

By amount paid the city for income	\$4,942,881 35
amount charged to ferry property for avenues that were laid out as streets, August, 1880, and which should be credited to this division,	250,000 00
paving avenues	11,530 84
amount paid to Department of Public Build- ings previous to January 1, 1881, and which should be credited to this division	60,277 65
estimated value of six ferry steamers \$116,771 90	
less 6 per cent. for depreciation, ...	7,006 31
	109,765 59
estimated value of real estate and franchise as per last re- port \$675,900 00	
added during the past year	27,000 00
	702,900 00
amount paid for awning, North Ferry, East Boston	742 94
land from Lincoln's Wharf	5,562 52
land from Battery Wharf	10,000 00
estimated value of tools and fixtures	6,000 00
estimated value of fuel on hand	84 66
estimated value of supplies on hand	2,888 19
amount expended on Eastern-avenue Wharf	1,499 46
cash with tollmen as capital	575 00
amount charged to new ferry steamers to date, amount not yet charged to new buildings and drops	50,275 67
	448 22
profit and loss in 28 years and 10 months	1,200,944 99
	\$7,356,376 99

STATEMENT SHOWING THE DIFFERENCE IN TRAVEL ON THE FERRIES
FROM FEBRUARY 1, 1898, TO FEBRUARY 1, 1899.

	<i>North.</i>	<i>South.</i>
Foot-passengers, at 1 cent each	8,667,879	3,367,982
Foot-passengers, by ticket	96,374	50,607
	8,764,253	3,418,589

Foot-passengers, free	71,405	5,614
One-horse teams and pleasure car- riages	230,691	165,175
Two-horse teams	83,275	102,530
Three-horse teams	3,612	4,360
Four-horse teams	5,820	8,175
Two-horse pleasure carriages and hacks	5,737	1,777
Two-cent tolls (at gate), hand-carts, etc.	4,412	2,438
Four-cent tolls	132,384	157,172
Six-cent tolls	3,432	2,636
Seven-cent tolls	8	7
Eight-cent tolls	9,285	12,312
Ten-cent tolls	693	809
Thirteen-cent tolls	505	811
Fifteen-cent tolls	64	35
Twenty-cent tolls	1	1
Thirty-cent tolls	7	5
Free teams	<u>4,524</u>	<u>2,183</u>

**Total Travel on both Ferries from February 1, 1894, to
February 1, 1899.**

	From Feb. 1, 1894, to Feb. 1, 1895.	From Feb. 1, 1895, to Feb. 1, 1896.	From Feb. 1, 1896, to Feb. 1, 1897.	From Feb. 1, 1897, to Feb. 1, 1898.	From Feb. 1, 1898, to Feb. 1, 1899.
One-horse teams.....	690,427	676,294	733,478	738,514	685,422
Two-horse teams	204,667	248,291	219,306	240,434	207,402
Three-horse teams.....	6,242	9,095	9,290	7,716	9,474
Four-horse teams.....	14,503	16,939	14,902	14,961	15,311
Two-horse carriages and hacks	16,236	10,349	16,299	14,659	13,582
Two-cent tolls for hand- carts, etc.....	5,726	7,059	8,321	8,819	6,850
Drag-wheels, etc.....	57	101	76	75	99
Foot-passengers.	11,281,321	11,929,790	12,034,300	12,466,272	12,182,842

TICKET STATEMENT.

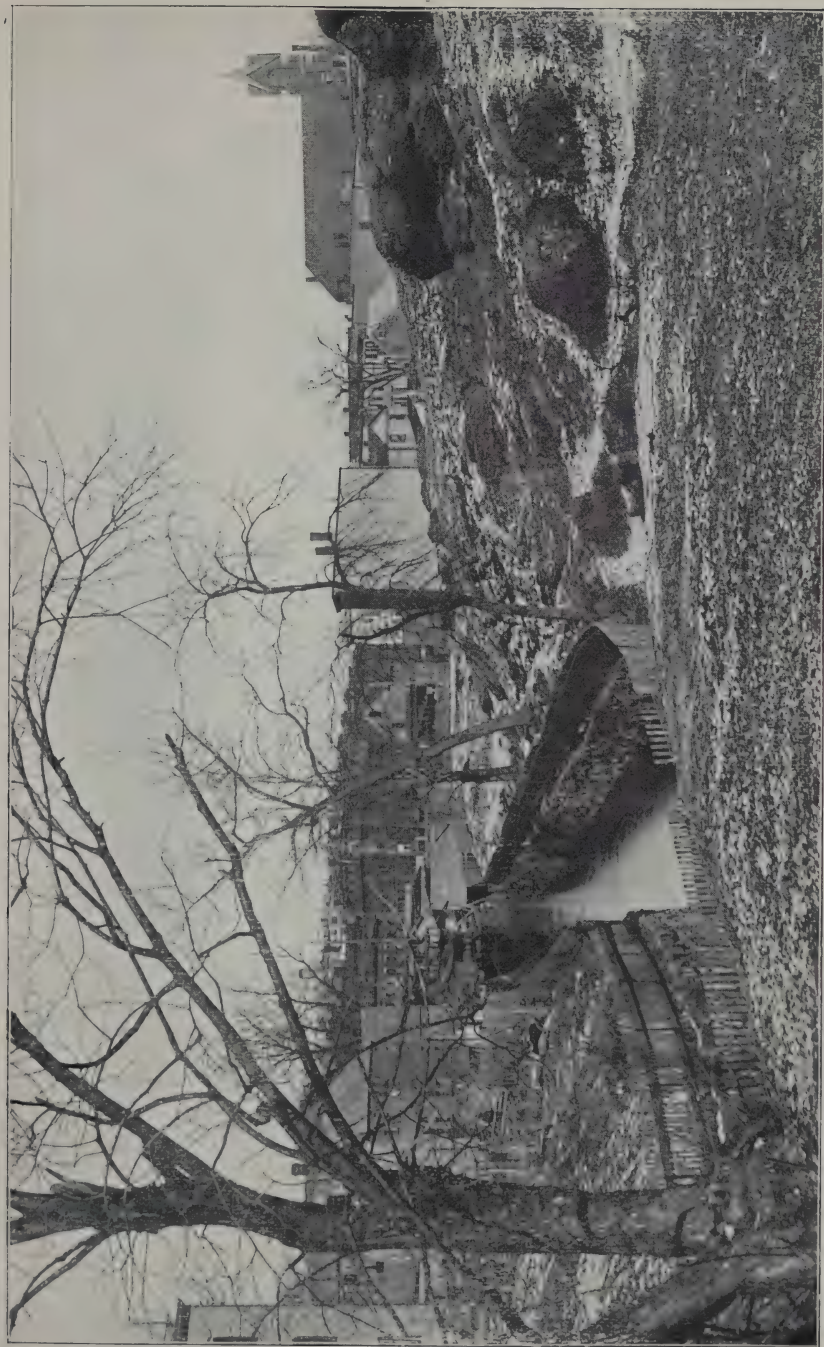
Foot-passes outstanding February 1, 1898	194,730
Foot-passes sold during the year	138,850
Foot-passes delivered on requisitions	8,700
	<u>342,280</u>
Received and destroyed during this year	146,981
	<u>195,299</u>

Team Tickets.

	1-Horse.	2-Horse.	3-Horse.	4-Horse.
Outstanding February 1, 1898.....	58,284	33,008	2,208	4,899
Sold during the year.....	346,640	185,808	7,902	13,980
Delivered on requisitions.....	4,144	688		
	409,068	219,504	10,110	18,879
Received and destroyed during the year.....	345,144	185,805	7,972	13,995
Outstanding February 1, 1899.....	63,924	33,699	2,138	4,884

Pleasure Carriage Tickets.

	1-Horse.	2-Horse.
Outstanding February 1, 1898.....	17,943	2,979
Sold during the year.....	51,020	7,540
Delivered on requisitions.....	700	
	69,663	10,519
Received and destroyed during the year.....	50,722	7,514
Outstanding February 1, 1899.....	18,941	3,005



COLUMBUS AVENUE, BETWEEN CENTRE AND RITCHIE STREETS, IN 1896.

APPENDIX C.

REPORT OF THE DEPUTY SUPERINTENDENT OF THE
PAVING DIVISION.

ROOM 44, CITY HALL, BOSTON, February 1, 1899.

MR. BENJ. W. WELLS, *Superintendent of Streets*:

DEAR SIR, — I respectfully submit the annual report of the expenditures and income of the Paving Division of the Street Department for the financial year ending January 31, 1899, showing the nature of the work, the number and variety of permits issued, and the details of expenditures involved in paving, macadamizing, regulating and constructing various streets.

Respectfully yours,

JOHN L. KELLY,

Deputy Superintendent.

The following table shows the amount expended for maintenance of the Paving Division and from special appropriations derived from loans for the last eight (8) years, not including the cost of street watering, to be found on another page:

	Maintenance.	Specials.	Totals.
1891 (13 months).....	\$872,936 40	\$1,014,324 26	\$1,887,260 66
1892	915,460 99	962,889 09	1,878,350 08
1893	745,681 52	707,801 49	1,453,483 01
1894	715,608 62	839,713 78	1,555,322 40
1895	683,899 42	823,011 70	1,506,911 12
1896	628,675 46	1,755,176 71	2,383,852 17
1897	690,187 34	1,413,142 79	2,103,330 13
1898	726,255 20	1,258,079 39	1,984,334 59

FINANCIAL STATEMENT.

REGULAR APPROPRIATION.

Appropriation for 1898-99	\$725,000 00
Amount collected for repairs made by Paving Division and inspector's services for different companies, etc.	1,255 20
	\$726,255 20
Amount of expenditures from February 1, 1898, to January 31, 1899	\$726,255 20

SPECIAL APPROPRIATIONS, PAVING AND STREET IMPROVEMENTS.

Amount of balances, 1897-98, less transfers	\$173,714 28	
Amount of appropriations, 1897-98, revenues and transfers	368,424 13	\$542,138 41
Amount of expenditures		447,491 02
Balances unexpended		<u>\$94,647 39</u>

TOTAL EXPENDITURES.

Maintenance appropriation	\$726,255 20
Special appropriations	447,491 02
Laying out and construction of highways	434,350 77
Blue Hill and other avenues	255,522 29
South Union Station	78,676 17
Rapid transit	16,265 06
Charlestown bridge	14,712 61
Abolishment of grade crossings	6,905 37
Beacham street	3,878 39
Quincy street, Ward 4	277 71
	<u>\$1,984,334 59</u>

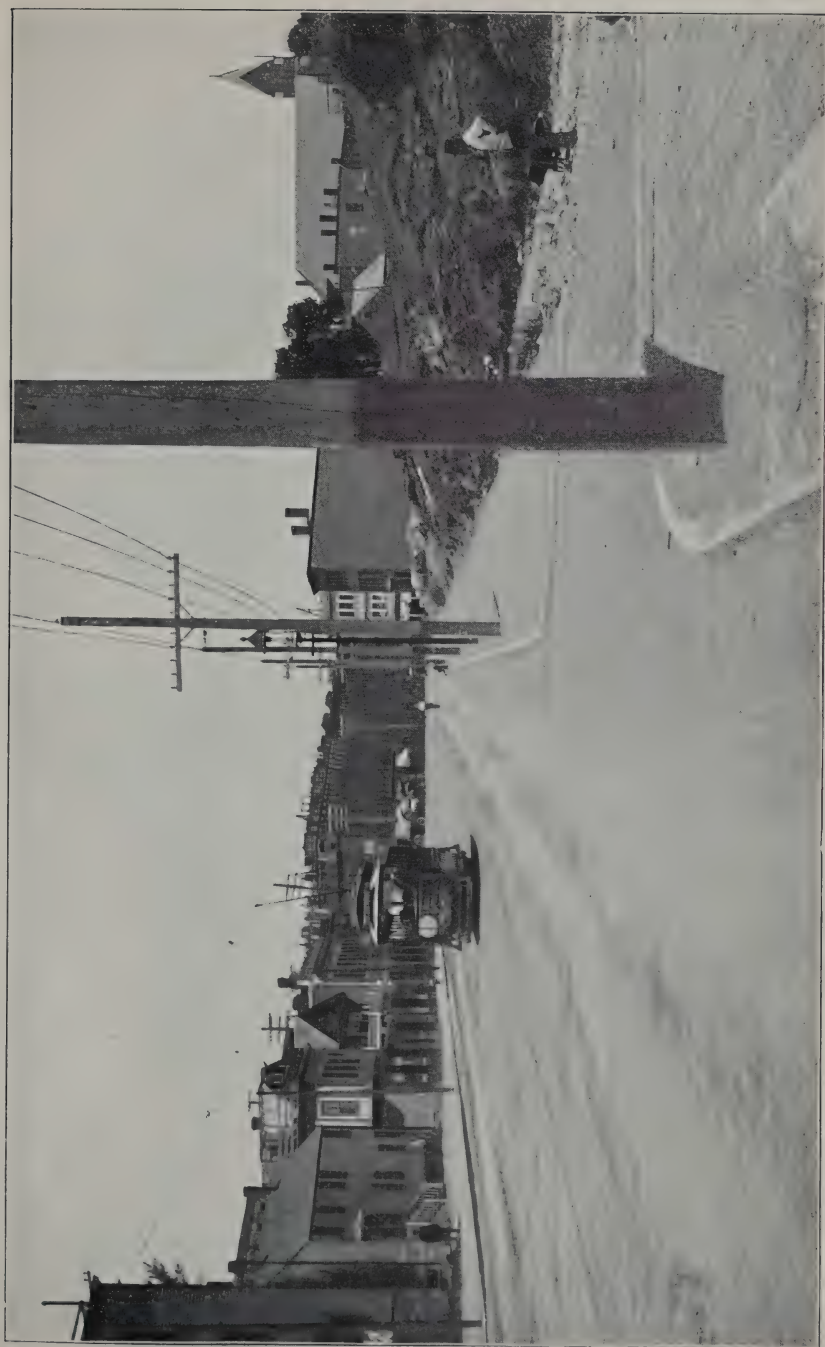
INCOME.

Statement showing the amount of bills deposited with the City Collector from February 1, 1898, on account of the Paving Division.

Edgestone and sidewalk assessments	\$6,371 60
Permits	15,240 50
	<u>\$21,612 10</u>

The amount paid into the city treasury during the year on account of the Paving Division, is as follows:

Sidewalk construction assessments (law of 1892)	\$8,736 12
Edgestone and sidewalk assessments (law of 1893)	8,017 78
Permits	10,547 00
	<u>\$27,300 90</u>



COLUMBUS AVENUE, BETWEEN CENTRE AND RITCHIE STREETS, IN 1898.

Objects of Expenditures from the Regular Appropriation, Classified by Districts, from Feb. 1, 1898, to Jan. 31, 1899.

DISTRICTS.	Repairs.	Snow.	Edgestone and Sidewalk Repairs.	Repairing Fences.	Repairing Plankwalks.	A. Miscellaneous.	B. In excess of Special Appropriation.	C. New Work.	Totals.
1. South Boston.....	\$3,620 52	\$11,424 94	\$6,854 53	\$870 78	\$1,149 94	.....	.....	.....	\$23,930 71
2. East Boston.....	21,437 28	7,458 40	4,900 30	241 11	1,000 86	.....	.....	.....	35,037 95
3. Charlestown.....	9,564 98	12,154 04	2,539 50	26 70	373 38	.....	.....	.....	24,718 60
4. Brighton.....	11,571 74	5,551 33	335 51	.....	1,149 43	.....	.....	.....	18,008 01
5. West Roxbury.....	29,238 25	8,431 42	1,311 37	68 00	2,330 39	.....	.....	.....	41,439 43
6. Dorchester.....	46,133 22	9,966 73	6,165 06	259 44	4,783 90	.....	\$2,705 00	.....	70,043 35
7. Roxbury.....	45,764 47	23,843 92	9,302 20	583 62	1,822 47	.....	.....	\$7,876 06	89,192 74
8. South End.....	18,423 78	46,614 29	4,535 02	13 94	1,975 03	.....	.....	.....	71,562 06
9. Back Bay.....	36,346 11	8,420 18	5,297 56	510 92	580 37	.....	.....	.....	51,164 14
10. North End.....	19,809 78	33,059 23	5,857 65	152 50	160 63	.....	.....	.....	65,039 79
						\$235,518 42	.....	.....	235,518 42
Totals....	\$241,920 13	\$172,963 48	\$47,158 70	\$2,727 01	\$15,386 40	\$235,518 42	\$2,705 00	\$7,876 06	\$726,255 20

SCHEDULE A.

Salaries of Paving Division office, February 1, 1898, to January 31, 1899.	\$13,550 59
Salaries of Permit office, February 1, 1898, to January 31, 1899	9,672 52
Salaries of inspectors, February 1, 1898, to Jan- uary 31, 1899	19,167 11
Salaries of engineers, February 1, 1898, to Jan- uary 31, 1899	4,378 37
Advertising in and subscribing for daily papers . .	259 77
Messenger service	120 55
Printing and stationery	5,779 52
Photographs	81 83
Medical attendance	73 00
Boiler insurance	400 00
Badges for employees	191 00
Holidays	24,417 03
Expenses of yards and stables, including repairs to carts and harnesses and stables, and care of horses	\$127,514 70
Less amount earned by Division teams	80,170 00
	47,344 70
Veterinary services	1,137 31
Tools, cost of keeping same in repair, etc. . . .	12,139 35
Telephones	2,310 83
Signs	4,017 74
Sundries	3,360 83
Edgestones and sidewalks, new	11,894 04
Artificial stone walks	4,024 66
Building new fences and plankwalks	459 89
Street cleaning	56,873 71
Execution of court (Tremont-street ledge) . .	5,726 12
Crossing repairs	12,226 31
Crossings (new)	1,748 39
New Crusher (Brighton)	3,622 61
Building new shed at Back Bay Yard	1,328 76
Building new office at West Roxbury Yard . .	754 44
Stock	3,934 03
	\$250,146 60
Less credit for stone taken from ledges	\$12,931 35
Less amount earned by steam rollers	1,696 83
	14,628 18
	<u>\$235,518 42</u>

SCHEDULE B.

The following schedule shows the expenditure from the maintenance appropriation of this division, in excess of special appropriations:

Dudley street	\$2,622 61
Street Improvements, Ward 24:	
Marsh street	82 39
	<u>\$2,705 00</u>

SCHEDULE C.

NEW WORK.

Shirley Street, Norfolk avenue to George street, macadamized, edgestone set (unfinished work from 1897).

Labor, teaming and materials, furnished by the city,	\$5,907 33
Amount paid to John McCourt, paving	1,968 73
	<u>\$7,876 06</u>

*DETAIL OF EXPENDITURES MADE UNDER
SPECIAL APPROPRIATIONS.*

Albany street, in front of Homœopathic Hospital (unfinished work from 1897).

Teaming furnished by the city	\$5 00
Amount paid to H. Gore & Co., paving	893 84
Amount paid to Boston Asphalt Company asphaltting,	323 16
	<u>\$1,222 00</u>

Alford street, Main street to Malden bridge. (Work unfinished.)

Labor, teaming and materials, furnished by the city	\$10,312 02
Amount of appropriation for Alford street	\$10,000 00
Amount paid out of Street Improvements, Ward 4	312 02
	<u>\$10,312 02</u>

Atlantic street, Ward 15, widening and construction (unfinished work from 1897).

Labor, teaming and materials, furnished by the city,	\$1,675 93
Amount paid to W. A. Murtfedt Co., artificial stone retaining walls	379 25
Amount paid to T. F. Broderick, retaining walls and fences	25 00
	\$2,080 18
Amount paid out of appropriation for Atlantic street, Ward 15	\$1,861 18
Amount paid out of Street Improvements, Ward 15	219 00
	<u>\$2,080 18</u>

Beacham street, between Main street and Arlington avenue. Paved and regulated.

Labor, teaming and materials, furnished by the city	\$5,129 43
Amount paid to P. Brennan & Co., paving	526 11
	\$5,655 54
Amount paid out of appropriation for Beacham street	\$3,878 39
Amount paid out of appropriation for Street Improvements, Ward 4	1,775 15
	<u>\$5,655 54</u>

Brighton avenue, between Linden and Chester streets. Resurfaced.

Labor, teaming and materials, furnished by the city	\$969 81
Amount paid to George H. Wentworth & Co., paving	103 10
	<u>\$1,072 91</u>

Brooke street, Ward 25, construction.

Amount paid to John E. Cassidy, land damages	<u>\$3,000 00</u>
--	-------------------

Cabot street, Linden Park to Vernon street, asphalted.

Amount retained from Barber Asphalt Paving Co., for work done in 1897, under contract	<u>\$207 52</u>
---	-----------------

Carleton street, Ward 10.

Labor, teaming and materials, furnished by the city,	<u>\$208 09</u>
--	-----------------

Centre street, Dorchester, reconstruction, macadamized and regulated.

Labor, teaming and materials, furnished by the city	\$4,808 07
Amount paid to James Dolan, paving	373 46

\$5,181 53

Amount of appropriation for Centre street	\$1,250 00
---	------------

Amount paid out of appropriation for Street Improvements, Ward 20	2,564 45
---	----------

Amount paid out of appropriation for Street Improvements, Ward 24	1,367 08
---	----------

\$5,181 53

Dorchester avenue, D street to Dorchester street, repaved and regulated.

Labor, teaming and materials, furnished by the city	\$3,122 78
Amount paid to Higgins & McGovern, paving	1,457 75

*\$4,580 53

Dudley street, Brook avenue to Upham's corner, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	\$3,642 20
Amount paid to T. M. Gill, paving	310 87
Amount paid to Doherty & Connors, paving	79 39

\$4,032 46

Amount of appropriation for Dudley street	\$1,139 00
---	------------

Amount paid out of appropriation for Paving Division	2,622 61
--	----------

Amount paid out of appropriation for Street Improvements, Ward 16	270 85
---	--------

\$4,032 46

Freeport street, Ward 24, retaining wall.

Labor	\$354 88
Amount paid to Collins & Ham, building retaining wall	6,018 10

\$6,372 98

* Charged to appropriation for Atlantic street, Ward 15, to offset the amount charged for Covington street to Street Improvements, Ward 15, in 1897.

Hull street, Salem to Snowhill street, paved with large granite blocks and regulated. Snowhill street to Commercial street, macadamized and regulated.

Labor, teaming and materials furnished by the city	\$7,024 21
Amount of appropriation for Hull street	\$6,851 63
Amount paid out of appropriation for Street Improvements, Ward 6	172 58
	<u>\$7,024 21</u>

North Margin street, Thacher to Endicott street, asphalted.

Labor, teaming and materials, furnished by the city	\$78 56
Amount retained from Boston Asphalt Company, for work done in 1897 under contract	74 33
	<u>\$152 89</u>

Quincy street, Ward 4 (now St. Martin street).

Labor, teaming and materials, furnished by the city	<u>\$277 71</u>
---	-----------------

Rand street, Roxbury, reconstruction, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	\$2,765 02
Amount paid to John McCourt, paving	90 93
	<u>\$2,855 95</u>

Amount of appropriation for Rand street \$1,604 55

Amount paid out of appropriation for Street Improvements, Ward 16	1,251 40
	<u>\$2,855 95</u>

Washington street, Grove Hall to Columbia road.

Labor and teaming	<u>\$107 30</u>
-----------------------------	-----------------

ABOLISHMENT OF GRADE CROSSINGS.

Congress and L streets.

Paving blocks	<u>\$6,905 37</u>
-------------------------	-------------------

CHARLESTOWN BRIDGE.

Approaches to bridge paved with large granite blocks and regulated.

Labor, teaming and materials, furnished by the city	<u>\$14,712 61</u>
---	--------------------

RAPID TRANSIT.

Tremont street, repaved from Boylston to Beacon street, and from Beacon street to Scollay square, where car tracks were removed.

Amount paid to Joseph B. O'Rourke, paving	\$900 12
Amount paid to Boston Elevated Railway Company, paving	1,154 68
	<u>\$2,054 80</u>

SOUTH UNION STATION.

Atlantic avenue and Dewey square, repaved with large granite blocks, and regulated.

Labor, teaming and materials, furnished by the city	\$15,734 43
Amount paid to H. P. Nawn, paving, etc.	8,225 91
	<u>\$23,960 34</u>

Dorchester avenue, paved with large granite blocks and regulated.

Labor, teaming and materials, furnished by the city	\$24,904 23
Amount paid to H. P. Nawn, paving, etc.	10,259 23
	<u>\$35,163 46</u>

Summer street, paved with large granite blocks and regulated.

Labor, teaming and materials, furnished by the city	\$11,511 63
Amount paid to H. P. Nawn, paving, etc.	8,040 74
	<u>\$19,552 37</u>

STREET IMPROVEMENTS, GENERAL.

Adams, Haymarket and Scollay squares, crossings relaid.

Labor, teaming and materials, furnished by the city	<u>\$1,236 37</u>
---	-------------------

Beacon street, Dartmouth to Exeter street, resurfaced (asphalt).

Amount paid to Barber Asphalt Paving Company, asphaltting	<u>\$633 90</u>
---	-----------------

Brattle street, Washington to Court street repaved with large granite blocks with pitch joints on a gravel base and regulated.

Labor, teaming and materials, furnished by the city	\$2,187 24
Amount paid to H. Gore & Co., paving	1,362 41

*\$3,549 65

Amount paid out of appropriation for Street Improvements, general	\$2,577 17
---	------------

Amount paid out of appropriation for Street Improvements, Ward 6	972 48
--	--------

\$3,549 65

Commercial street, State to Clinton street, repaved with large granite blocks on a concrete base, with pitch joints and regulated.

Labor, teaming and materials, furnished by the city	\$8,819 49
---	------------

Hayward place, Washington street to Harrison avenue, asphalted.

Labor, teaming and materials, furnished by the city	\$437 12
---	----------

Amount paid to Boston Paving Company, asphaltina	1,584 88
--	----------

\$2,022 00

Amount paid out of appropriation for Street Improvements, general	\$1,687 38
---	------------

Amount paid out of appropriation for Street Improvements, Ward 7	334 62
--	--------

\$2,022 00

Howard street, Bulfinch to Court street, repaved with large granite blocks on a concrete base with pitch joints and regulated.

Labor, teaming and materials, furnished by the city	\$4,477 26
---	------------

Amount paid to H. Gore & Co., paving	1,090 78
--------------------------------------	----------

Amount paid to Perrin & Carter, concrete base	809 88
---	--------

\$6,377 92

Amount paid out of appropriation for Street Improvements, general	\$4,943 71
---	------------

Amount paid out of appropriation for Street Improvements, Ward 6	1,434 21
--	----------

\$6,377 92

*\$134.85 paid by Boston Elevated Railway Company.

Kilby street, State to Milk street, asphalted.

Amount paid to Barber Asphalt Paving Company,
asphalting \$6,949 00

Massachusetts avenue.

Bricks \$250 00

Tremont street, Boylston to Pleasant street, and **Shawmut avenue**, Tremont street to Pleasant street.

Repaved with large granite blocks on a concrete base with pitch joints, and regulated.

Labor, teaming and materials, furnished by the
city \$26,296 93

Amount paid to H. Gore & Co., paving . . . 7,364 26

Amount paid to Perrin & Carter, concrete base . . 6,846 00

*\$40,507 19

Amount paid out of appropriation for
Street Improvements, general . \$22,076 88

Amount paid out of appropriation
for Street Improvements, Ward 7 . 4,220 05

Amount paid out of appropriation
for Rapid Transit 14,210 26

\$40,507 19

Tremont street, Weston to Hammond street, repaved with large granite blocks, on a gravel base, and regulated.

Labor, teaming and materials, furnished by the
city \$22,326 50

Amount paid to James Doherty & Co., paving . . 2,384 12

\$24,710 62

Amount paid out of appropriation
for Street Improvements, gen-
eral \$18,180 61

Amount paid out of appropriation
for Street improvements, Ward
18 6,530 01

\$24,710 62

STREET IMPROVEMENTS, WARD 1.

Breed street, resurfaced.

Labor, teaming and materials, furnished by the
city \$981 18

* \$6,531.70 paid by Boston Elevated Railway Company.

Eutaw street, edgestone set, brick sidewalks laid.

Labor, teaming and materials, furnished by the city	\$401 60
Amount paid to Ward & Conlin, paving	37 25

\$438 85

Maverick street.

Teaming	\$12 50
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Meridian street, Eutaw to Condor street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city	\$2,785 65
Amount paid to Ward & Conlin, paving	723 09

\$3,508 74

Morris street, resurfaced.

Labor, teaming and materials, furnished by the city	\$916 56
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Paris street.

Teaming	\$22 50
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Pope street, Swift to Curtis street, edgestone reset and brick sidewalks laid.

Teaming	\$48 00
Amount paid to Ward & Conlin, paving	71 67

\$119 67

STREET IMPROVEMENTS, WARD 2.

London street.

Gravel	\$53 20
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Marginal street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city	\$878 11
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Maverick street, resurfaced.

Labor, teaming and materials, furnished by the city	\$385 96
---	----------

Meridian street, Decatur street to Central square, repaved and regulated.

Labor, teaming and materials, furnished by the city	\$3,048 44
Amount paid to Ward & Conlin, paving	1,789 91

Carried forward,

\$4,838 35

<i>Brought forward,</i>	\$4,838 35
Amount paid out of appropriation for Street Improvements, Ward 2	\$4,557 53
Amount paid out of appropriation for Street Improvements, gen- eral	280 82
	<u>\$4,838 35</u>

Paris street.

Labor and material	<u>\$125 20</u>
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STREET IMPROVEMENTS, WARD 3.

Bainbridge street.

Labor	<u>\$28 73</u>
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Bunker Hill street, Chelsea to Elm street, repaved with large granite blocks, and regulated.

Labor, teaming and materials, furnished by the city	\$27,122 63
Amount paid to John Turner & Co., paving	\$4,377 73
Less amount paid for old paving blocks	2,234 55
	<u>2,143 18</u>
	*\$29,265 81

Amount paid out of appropriation for Street Improvements, Ward 3	\$22,967 89
Amount paid out of appropriation for Street Improvements, Ward 4	6,297 92
	<u>\$29,265 81</u>

Green street, resurfaced.

Labor, teaming and materials, furnished by the city	<u>\$486 87</u>
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Hancock street.

Stone	<u>\$20 72</u>
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Hull street, repaved and regulated.

Labor, teaming and materials, furnished by the city	\$280 30
Amount paid to P. Brennan & Co., paving	121 69
	<u>\$401 99</u>

* \$3,946.20 paid by Boston Elevated Railway Company.

Marion street, macadamized and regulated.

Labor, teaming and materials, furnished by the city	\$1,070 59
Amount paid to James F. Haley, paving	212 61
	\$1,283 20

Princeton street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city	\$183 65
Amount paid to James F. Haley, paving	252 36
	\$436 01

Vine, Tufts, Moulton and Corey streets, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	\$542 04
Amount retained from Barber Asphalt Paving Company, for work done in 1897 under contract,	318 96
	\$861 00

STREET IMPROVEMENTS, WARD 4.

Arlington avenue, resurfaced.

Labor, teaming and materials, furnished by the city	\$289 60
Amount paid to P. Brennan & Co., paving	126 38
	\$415 98

Baldwin street, unfinished work from 1897.

Stone	\$385 19
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Dorrance street, unfinished work from 1897.

Stone	\$356 16
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Main street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city,	\$385 61
Amount paid to Haley & O'Hara, paving	230 11
	\$615 72

Amount paid out of appropriation for
Street Improvements, Ward 4 . . . \$592 36

Amount paid out of appropriation for
Street Improvements, Ward 3 . . . 7 50

Amount paid out of appropriation for
Street Improvements, Ward 5 . . . 15 86

\$615 72

Mill street, between Rutherford avenue and Essex street, repaved and regulated.

Labor, teaming and materials, furnished by the city,	\$709 85
Amount paid to James F. Haley, paving	249 60
	<u>\$959 45</u>

Perkins street, Cambridge street to Somerville line, macadamized and regulated.

Labor, teaming and materials, furnished by the city,	\$1,550 77
Amount paid to James F. Haley, paving	424 75
	<u>\$1,975 52</u>

St. Martin's street.

Amount paid to Geo. T. McLauthlin & Co., fence and railing	<u>\$310 00</u>
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Sullivan street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	<u>\$926 86</u>
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West street, Beacham to Alford street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city,	\$68 00
Amount paid to P. Brennan & Co., paving	112 17
	<u>\$180 17</u>

STREET IMPROVEMENTS, WARD 5.

Boyle street, unfinished work from 1897.

Teaming and materials	<u>\$20 00</u>
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Call street, Park street to Chelsea street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city	\$316 95
Amount paid to James F. Haley, paving	119 04
	<u>\$435 99</u>

Chestnut street, Mt. Vernon to Chestnut street, macadamized and regulated.

Labor, teaming and materials, furnished by the city,	\$1,657 07
Amount paid to P. Brennan & Co., paving	498 05
	<u>\$2,154 12</u>

Harvard street, westerly side, between Washington and Devens street, regulated.

Amount paid to James F. Haley, paving . . .	<u>\$201 52</u>
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Joiner street, Park to Water street, macadamized and regulated.

Labor, teaming and materials, furnished by the city . . .	\$1,382 83
Amount paid to James F. Haley, paving . . .	254 90

	<u>\$1,637 73</u>
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Lynde street.

Teaming	<u>\$10 00</u>
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Miller street, Lawrence street to Rutherford avenue, resurfaced and regulated.

Labor and materials, furnished by the city . . .	\$143 00
Amount paid to P. Brennan & Co., paving . . .	439 40

	<u>\$582 40</u>
--	-----------------

Putnam street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city . . .	\$129 40
Amount paid to Haley & O'Hara, paving . . .	180 15

	<u>\$309 55</u>
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Washington street, resurfaced.

Labor, teaming and materials, furnished by the city . . .	<u>\$798 00</u>
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STREET IMPROVEMENTS, WARD 6.

Atlantic avenue, easterly side, between T and Commercial wharves, repaved.

Labor, teaming and materials, furnished by the city . . .	\$2,421 74
Amount paid to Ward & Conlin, paving . . .	535 32

	<u>\$2,957 06</u>
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Bartlett place, repaved.

Labor, teaming and materials, furnished by the city . . .	<u>\$357 26</u>
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Beacon street, Tremont to Somerset street, unfinished work from 1897.

Amount paid to H. Gore & Co., paving . . .	<u>\$968 09</u>
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Bulfinch street, Bowdoin street to Bulfinch place, unfinished work from 1897.

Amount paid to H. Gore & Co., paving . . . \$725 82

Congress street, at Water street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city \$273 69

Amount paid to H. Gore & Co., paving . . . 131 60

*\$405 29

Cooper street, Endicott to Stillman street, asphalted.

Amount retained from Barber Asphalt Paving Company, for work done in 1897, under contract, \$62 99

Hanover street, Washington to Court street, repaved with large granite blocks on a concrete base, with pitch joints and regulated.

Labor, teaming and materials, furnished by the city \$8,350 49

Amount paid to Perrin & Carter, concrete base . 2,264 55

Amount paid to H. Gore & Co., paving . . . 2,571 54

†\$13,186 58

Amount paid out of Street Improvements, Ward 6 \$8,350 49

Amount paid out of Street Improvements, General 4,836 09

\$13,186 58

Lime alley, unfinished work from 1897.

Teaming \$63 00

Margaret street, repaved.

Labor, teaming and materials, furnished by the city \$744 63

Amount paid to B. Green, paving 76 85

\$821 48

North street, Merchants' row to Union street, unfinished work from 1897.

Amount paid to H. Gore and Co., paving . . . \$701 77

Sheafe street, paved with large granite blocks, and regulated.

Labor, teaming and materials, furnished by the city \$3,228 01

Amount paid to B. Green, paving 385 50

\$3,613 51

*\$26.72 paid by Boston Elevated Railway Company.

†\$2,520.18 paid by Boston Elevated Railway Company.

Somerset street, unfinished from 1897.

Teaming	<u>\$100 50</u>
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State street, Washington to Commercial street.

Amount retained from H. Gore & Co., for work done in 1897, under contract	<u>\$276 25</u>
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Unity street, Charter to Tileston street, asphaltd.

Amount retained from Barber Asphalt Paving Company, for work done in 1897, under con- tract	<u>\$74 97</u>
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Water street, Washington to Devonshire street,
unfinished work from 1897.

Amount paid to H. Gore & Co., paving	<u>\$612 69</u>
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Wiget street, North Margin to Salem street, asphaltd.

Amount retained from Barber Asphalt Paving Company, for work done in 1897, under con- tract	<u>\$35 52</u>
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STREET IMPROVEMENTS, WARD 7.

Atlantic avenue, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	<u>\$273 17</u>
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Avery street, unfinished work from 1897.

Amount paid to H. Gore & Co., paving	<u>\$693 18</u>
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Boylston street, Washington street to Park
square, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	\$133 54
Amount paid to T. M. Gill, paving	208 95
	<u>\$342 49</u>

Congress street, Atlantic avenue to the bridge,
unfinished work from 1897.

Labor, teaming and materials, furnished by the city	\$1,280 66
Amount paid to H. Gore & Co., paving	1,084 70
	<u>\$2,365 36</u>

Exeter place, unfinished work from 1897.

Amount paid to H. Gore & Co., paving	\$223 83
Amount retained from Boston Asphalt Paving Company, for work done in 1897, under con- tract	53 18
	<u>\$277 01</u>

Hollis and other streets, asphalted.

Amount paid to Barber Asphalt Paving Company, asphalting	\$602 98
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Lagrange street, Tremont street to Police Station No. 4,
asphalted.

Amount retained from Barber Asphalt Paving Com- pany, for work done in 1897, under contract	<u>\$55 92</u>
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Mason street, unfinished work from 1897.

Amount paid to T. M. Gill, paving	<u>\$93 88</u>
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Tyler street, Broadway to Beach street, macadamized and
regulated.

Labor, teaming and materials, furnished by the city, ...	\$9,629 73
Amount paid to P. H. Bradley, paving	630 56
	<u>\$10,260 29</u>

Washington street, Eliot street to the bridge.

Amount retained from William Higgins, for work done in 1897, under contract	<u>\$504 30</u>
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Winthrop square.

Amount retained from H. Gore & Co., for work done in 1897, under contract	<u>\$171 28</u>
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STREET IMPROVEMENTS, WARD 8.

Bowdoin street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	<u>\$429 46</u>
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Bowdoin street, Cambridge to Allston street, resurfaced and
regulated.

Labor, teaming and materials, furnished by the city	\$1,759 61
Amount paid to D. J. Kiley, paving	214 32
	<u>\$1,973 93</u>

Brighton street, Lowell to Leverett street, paved with large granite blocks on a gravel base, with pitch joints, and regulated.

Labor, teaming and materials, furnished by the city	\$2,955 28
Amount paid to D. J. Kiley, paving	987 07
	<u>*\$3,942 35</u>

Bulfinch street.

Teaming	\$56 50
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Chambers street, unfinished work from 1897.

Paving	\$21 93
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Charles street, Cambridge to Leverett street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	\$1,123 36
Amount paid to D. J. Kiley, paving	679 82
	<u>\$1,803 18</u>

Derne street, unfinished work from 1897.

Teaming	\$56 00
-------------------	---------

Eaton street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city	\$1,476 33
Amount paid to D. J. Kiley, paving	251 00
	<u>\$1,727 33</u>

Fruit street, at corner Charles street, regulated.

Labor, teaming and materials, furnished by the city, ...	\$540 77
Amount paid to D. J. Kiley, paving	92 77
	<u>\$633 54</u>

Leverett street, repaved.

Material	\$126 82
Amount paid to Patrick McGovern, paving	308 00
	<u>\$434 82</u>

Lynde street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$1,227 52
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Myrtle street.

Labor and materials, furnished by the city	\$102 60
--	----------

North Russell street, unfinished work from 1897.

Teaming	\$218 50
Amount paid to D. J. Kiley, paving	92 86
	<u>\$311 36</u>

Parkman street, North Anderson to Blossom street, asphalted and regulated.

Labor, teaming and materials, furnished by the city, .	\$1,990 24
Amount paid to D. J. Kiley, paving	315 75
Amount paid to Barber Asphalt Paving Company, asphaltting	1,486 65
	<u>\$3,792 64</u>

Staniford street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city, .	\$547 13
Amount paid to D. J. Kiley, paving	133 41
	<u>\$680 54</u>

Willard street, repaved and regulated.

Labor, teaming and materials, furnished by the city, .	\$2,360 54
Amount paid to D. J. Kiley, paving	320 42
	<u>\$2,680 96</u>

STREET IMPROVEMENTS, WARD 9.

Asylum street, paved.

Proportional part of cost of paving paid to A. A. Libby & Co.	\$325 00

Bradford street, asphalted.

Labor	\$11 55
Amount retained from Jones & Meehan, for work done in 1897, under contract	183 50
	<u>\$195 05</u>

Cobb street, asphalted.

Amount retained from Boston Asphalt Company, for work done in 1897, under contract	\$149 37

Dedham street, Tremont street to Shawmut avenue, macadamized and regulated.

Labor, teaming and materials, furnished by the city, .	\$4,084 99
Amount paid to Jones & Meehan, paving	644 64
	<u>\$4,729 63</u>

Harrison avenue, at Dover street, repaved.

Labor, teaming and materials, furnished by the city,	<u>\$488 40</u>
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Malden street, Washington to Meander street, resurfaced.

Labor, teaming and materials, furnished by the city,	<u>\$1,000 62</u>
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Mayo street, asphalted.

Cement	\$2 30
Amount retained from Boston Asphalt Company for work done in 1897, under contract	61 11
	<u>\$63 41</u>

Pelham street, asphalted.

Flagging	\$34 97
Amount retained from Jones & Meehan for work done in 1897, under contract	97 77
	<u>\$132 74</u>

Plympton street.

Labor	<u>\$4 00</u>
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Shawmut avenue, Lucas street to a point 250 feet northerly,
asphalted and regulated.

Labor, teaming and materials, furnished by the city,	\$2,450 30
Amount paid to H. Gore & Co., paving	1,062 26
Amount paid to Boston Asphalt Company, asphalt- ing	2,808 67
	<u>*\$6,321 23</u>

Upton street (unfinished work from 1897), Tremont street to
Shawmut avenue, macadamized and regulated.

Labor, teaming and materials, furnished by the city,	\$2,511 00
Amount paid to Jones & Meehan, paving	554 03
	<u>\$3,065 03</u>

Washington street, Eliot to Dover street, unfinished work
from 1897.

Labor and materials, furnished by the city	\$140 88
Amount retained from Jones & Meehan for work done in 1897, under contract	429 26
	<u>\$570 14</u>

*\$1,138.50 paid by the Boston Elevated Railway Company.

Washington street, Dover to Waltham street, unfinished work from 1897.

Flagging	\$163 68
Amount retained from Jones & Meehan for work done in 1897, under contract	366 67

\$530 35

Waterford street, asphalted.

Amount paid to Jones & Meehan, paving	\$298 34
Amount retained from Jones & Meehan for work done in 1897, under contract	79 35

\$377 69

STREET IMPROVEMENTS, WARD 10.

Artificial stone sidewalks.

Amount allowed on artificial stone sidewalks	\$172 32
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Belvidere street, Falmouth street to Boston & Albany Railroad, resurfaced and regulated.

Labor, teaming and materials, furnished by the city, ...	\$615 46
Amount paid to T. M. Gill, paving	212 77

\$828 23

Berwick park, macadamized and regulated.

Labor, teaming and materials, furnished by the city, ...	\$2,741 51
Amount paid to Barnes-Ruffin Company, paving	312 08

\$3,053 59

Fayette street, Pleasant street to Ferdinand street, old cobble stones removed and paved with granite blocks and regulated.

Labor, teaming and materials, furnished by the city, ...	\$3,670 62
Amount paid to Barnes-Ruffin Company, paving	942 85

\$4,613 47

Irrington street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$569 52
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Melrose street, Ferdinand to Pleasant street, old cobble stones removed and paved with granite blocks and regulated.

Labor, teaming and materials, furnished by the city, ...	\$2,783 59
Amount paid to Barnes-Ruffin Company, paving	744 74

\$3,528 33

New edgestones and sidewalks.

Paving	<u>\$157 41</u>
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STREET IMPROVEMENTS, WARD 11.**Beacon street, asphalted.**

Labor, teaming and materials, furnished by the city,	\$1,888 78
Amount paid to Barber Asphalt Paving Company,	
asphalting	<u>3,518 00</u>
	<u>\$5,406 78</u>

Boylston street, Berkeley to Clarendon street.

Amount retained from Barber Asphalt Paving Com-	
pany for work done in 1897, under contract . . .	<u>\$593 22</u>

STREET IMPROVEMENTS, WARD 12.**Camden street, Washington to Northfield street, unfinished work from 1897.**

Labor, teaming and materials, furnished by the city,	\$2,327 95
Amount paid to Jones & Meehan, paving	<u>123 43</u>
	\$2,451 38

Amount paid out of Street Improve-		
ments, Ward 12	\$2,448 88	
Amount paid out of Street Improve-		
ments, Ward 9	<u>2 50</u>	
		<u>\$2,451 38</u>

Camden street, Tremont street to Columbus avenue, macadamized

Labor, teaming and materials, furnished by the city,	<u>\$1,751 32</u>
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Columbus avenue, Massachusetts avenue to Railroad bridge.

Amount paid to Barber Asphalt Paving Co., asphalt-	
ing	<u>\$2,021 72</u>

Concord square, unfinished work from 1897.

Material	<u>\$42 47</u>
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Concord street, Albany street to Harrison avenue, resurfaced.

Labor, teaming and materials, furnished by the city,	<u>\$1,625 86</u>
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East Lenox street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city,	<u>\$460 25</u>
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East Newton street, Albany street to Washington street.

Labor, teaming and materials, furnished by the city, \$1,946 85

Greenwich park, unfinished work from 1897.

Labor, teaming and materials, furnished by the city, \$96 30

Lincoln place.

Amount retained from Barber Asphalt Paving Company for work done in 1897, under contract . \$46 82

Massachusetts avenue, Columbus avenue to Tremont street, asphalted.

Amount retained from Boston Paving Company for work done in 1897, under contract \$676 29

Northampton street (work not finished).

Labor, teaming and materials, furnished by the city, \$862 17

Wellington street, Columbus avenue to N.Y., N. H. & H. R.R.

Labor, teaming and materials, furnished by the city, \$1,502 90

STREET IMPROVEMENTS, WARD 13.

B street, Seventh to Fourth street, repaved and regulated; Broadway to Third street; macadamized and regulated.

Labor, teaming and materials, furnished by the city, \$2,426 01

Amount paid to William Higgins, paving 1,178 58

\$3,604 59

Broadway, E street to railroad bridge.

Labor and materials, furnished by the city \$174 41

Amount retained from H. Gore & Co., for work done in 1897, under contract 413 03

\$587 44

Congress street, A to C street, repaved.

Labor, teaming and materials, furnished by the city, \$1,066 79

Amount paid to J. B. O'Rourke, paving 431 97

\$1,498 76

D street.

Teaming \$27 00

Dorchester avenue, repaved.

Labor \$255 90

Gold street, A to B street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city,	\$1,079 70
Amount paid to William H. Glenn, paving . . .	117 20
	<u>\$1,196 90</u>

Third street, A to B street, resurfaced.

Labor, teaming and materials, furnished by the city,	<u>\$1,134 06</u>
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STREET IMPROVEMENTS, WARD 14.**Broadway, at Lincoln School, asphalted, unfinished work from 1897.**

Labor, teaming and materials, furnished by the city,	\$82 25
Amount paid to H. Gore & Co., paving . . .	648 83
Amount retained from Boston Asphalt Company, for work done in 1897, under contract . . .	150 42
	<u>\$881 50</u>

Broadway, Dorchester street to St. John's Church, asphalted (unfinished).

Labor, teaming and materials, furnished by the city,	*\$1,595 52
Amount paid out of appropriation for Street Improvements, Ward 14 . . .	\$934 27
Amount paid out of appropriation for Street Improvements, Ward 15 . . .	661 25
	<u>\$1,595 52</u>

East First street.

Teaming	<u>\$18 00</u>
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East Fourth street, H to N street, resurfaced and regulated.

Labor, teaming and materials furnished by the city	\$2,703 54
Amount paid to W. H. Glenn, paving . . .	472 73
Amount paid to Redmond McDonough, paving . .	267 52
	<u>\$3,443 79</u>

East Seventh street, L to M street (unfinished work from 1897).

Teaming and materials, furnished by the city . .	\$460 00
Amount paid to Redmond McDonough, paving . .	522 26
	<u>\$982 26</u>

*\$1,874.61 paid by the Boston Elevated Railway Company.

East Seventh street, M to N street.

Labor, teaming and materials, furnished by the city	\$1,879 22
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Emerson street (unfinished).

Labor and teaming	\$97 00
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Fifth street, I to K street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city	\$1,939 83
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Amount paid to Redmond McDonough, paving	451 17
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	<u>\$2,391 00</u>
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Jay street, unfinished work from 1897.

Teaming	\$210 00
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Amount paid to Redmond McDonough, paving	81 54
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	<u>\$291 54</u>
--	-----------------

L street.

Teaming	\$6 00
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Ninth street.

Teaming	\$43 50
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O street, unfinished work from 1897.

Teaming	\$12 00
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Amount paid to Redmond McDonough, paving	107 51
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	<u>\$119 51</u>
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STREET IMPROVEMENTS, WARD 15.

Artificial stone sidewalks.

Amount allowed on artificial stone sidewalks	\$264 02
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Broadway, E to Dorchester street, asphalted (unfinished work from 1897).

Amount paid to H. Gore & Co., paving	\$1,863 25
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Amount retained from Boston Asphalt Company, for work done in 1897, under contract	271 76
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	<u>*\$2,135 01</u>
--	--------------------

Dorchester avenue.

Labor	\$126 73
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E street.

Labor, teaming and materials, furnished by the city, ...	\$89 55
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*\$471.69 paid by Boston Elevated Railway Company.

Eighth street.

Teaming	<u>\$9 00</u>
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Fourth street.

Material furnished by the city	<u>\$139 38</u>
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Gates street, unfinished work from 1897.

Teaming and materials, furnished by the city .	<u>\$142 02</u>
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Gold street, F to Dorchester street, resurfaced.

Labor, teaming and materials, furnished by the city,	<u>\$338 42</u>
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Loring street, Seventh to Eighth street, resurfaced.

Labor, teaming and materials, furnished by the city,	\$202 50
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Amount paid to W. H. Glenn, paving	308 10
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<u>\$510 60</u>

Mercer street, Dorchester to Eighth street, unfinished work from 1897.

Teaming and materials, furnished by the city .	<u>\$497 05</u>
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Middle street, Dorchester avenue to Dorchester street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city,	\$1,151 28
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Amount paid to William H. Glenn, paving	541 76
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<u>\$1,693 04</u>

Newman street, Dorchester to Mercer street, unfinished work from 1897.

Teaming and materials, furnished by the city .	<u>\$513 45</u>
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Story street, removing hill.

Labor, teaming and materials, furnished by the city,	\$4,383 71
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Amount paid to J. J. Sullivan, excavating	1,256 52
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<u>\$5,640 23</u>

Woodward street, Dorchester avenue to Dorchester street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city	\$1,420 32
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Amount paid to J. B. O'Rourke, paving	443 58
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<u>\$1,863 90</u>

STREET IMPROVEMENTS, WARD 16.

Andrew square, unfinished work from 1897.

Teaming and materials, furnished by the city	.	\$1,622	70
Amount paid to J. B. O'Rourke, paving	.	116	75

 \$1,739 45

Amount paid out of appropriation for Street Improvements, Ward 16	.	\$490	25
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Amount paid out of appropriation for Street Improvements, Ward 15	.	1,249	20
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 \$1,739 45
Boston street, unfinished work from 1897 . . .

Teaming and materials, furnished by the city	.	\$194	20
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Clifton street, regulated.

Labor, teaming and materials, furnished by the city,		\$571	19
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Dacia street, unfinished work from 1897.

Teaming and materials, furnished by the city	.	\$284	50
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Dorchester avenue, unfinished work from 1897.

Gravel	.	\$149	97
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Amount paid to J. B. O'Rourke, paving	.	1,044	25
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 \$1,194 22
East Cottage street.

Labor, teaming and materials, furnished by the city,		\$990	70
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Hartford street, resurfaced.

Labor, teaming and materials, furnished by the city,		\$2,844	74
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Howard avenue, resurfaced.

Labor, teaming and materials, furnished by the city,		\$1,006	80
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Ingleside street, unfinished work from 1897.

Teaming and materials, furnished by the city	.	\$197	39
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Judson street, unfinished work from 1897.

Teaming	.	\$135	50
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Julian street, unfinished work from 1897.

Teaming	.	\$69	00
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Locust street, unfinished work from 1897.

Teaming and materials, furnished by the city	.	\$221	29
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Massachusetts avenue.

Labor, teaming and materials, furnished by the city	\$215 80
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Mt. Vernon street, unfinished work from 1897.

Material furnished by the city	\$40 60
Amount paid to Redmond McDonough, paving	134 30

 \$174 90
Preble street.

Amount paid to J. B. O'Rourke, paving	\$36 40
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Quincy street.

Teaming	\$80 00
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Sargent street, resurfaced.

Labor, teaming and materials, furnished by the city	\$1,084 69
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Swett street, unfinished work from 1897.

Material furnished by the city	\$40 00
Amount paid to J. B. O'Rourke, paving	609 98

 \$649 98
Wayland street, resurfaced.

Labor, teaming and materials, furnished by the city	\$1,540 46
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Willow court, unfinished work from 1897.

Teaming and materials, furnished by the city	\$267 48
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STREET IMPROVEMENTS, WARD 17.**Ambrose street, resurfaced and regulated.**

Labor, teaming and materials, furnished by the city	\$470 06
Amount paid to John McCourt, paving	284 12

 \$754 18
Dearborn street.

Labor, teaming and materials, furnished by the city	\$58 48
Amount paid to John McCourt, paving	157 22

 \$215 70
Massachusetts avenue.

Labor	\$14 30
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Norfolk avenue, Magazine to Shirley street, repaved with old granite blocks and regulated.

Labor, teaming and materials, furnished by the city	\$4,812 10
Amount paid to Barnes, Ruffin Company, paving	3,915 35
	<u>\$8,727 45</u>

Washington street, at Ball street, repaved.

Amount paid to McCourt & Gilligan, paving	<u>\$527 37</u>
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Webber street.

Labor, teaming and materials, furnished by the city	<u>\$478 72</u>
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Winthrop street.

Labor, teaming and materials, furnished by the city	<u>\$258 51</u>
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STREET IMPROVEMENTS, WARD 18.

Camden street, Shawmut avenue to Tremont street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	<u>\$4,600 32</u>
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Calumet street, unfinished work from 1897.

Teaming and materials, furnished by the city	<u>\$77 80</u>
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Sterling street.

Teaming	<u>\$161 50</u>
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Terry street, unfinished work from 1897.

Teaming	<u>\$6 00</u>
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Tremont street, Lenox street to Roxbury crossing, unfinished work from 1897.

Labor, teaming and materials, furnished by the city, ...	<u>\$530 86</u>
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Vernon street, Washington to Tremont street, macadamized and regulated.

Labor, teaming and materials, furnished by the city, ...	\$7,087 82
Amount paid to Wm. E. Curley, paving	1,018 03
	<u>\$8,105 85</u>

Warren street, unfinished work from 1897.

Gravel	<u>\$55 80</u>
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Washington street, unfinished work from 1897.

Teaming	<u>\$9 00</u>
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STREET IMPROVEMENTS, WARD 19.

Burney street, unfinished work from 1897.Gravel \$21 65**Calumet street**, unfinished work from 1897.Teaming and materials, furnished by the city . . . \$177 14**Conant street**, Parker to Phillips street, unfinished work from 1897.

Labor, teaming and materials, furnished by the city, \$4,027 84

Amount paid to John McCourt, paving . . . 541 30

\$4,569 14**Heath street**, unfinished work from 1897.Material, furnished by the city \$82 65**Longwood avenue**, unfinished work from 1897.Labor and materials, furnished by the city . . . \$39 98**Parker street**, Huntington avenue to Ruggles street, paved with granite blocks, and regulated.Labor, teaming and materials, furnished by the city, \$6,650 41**Tremont street**, unfinished work from 1897.Materials, furnished by the city \$102 47**Vernon street**, unfinished work from 1897.Material, furnished by the city \$10 80**Wait street.**Labor, teaming and materials, furnished by the city, \$893 10

STREET IMPROVEMENTS, WARD 20.

Artificial stone sidewalks.Amount allowed on artificial stone sidewalks . . . \$591 92**Elmo street**, edgestones set, gutters paved, sidewalks graveled.Labor, teaming and materials, furnished by the city, \$1,178 55**Glenway street**, Bradshaw to Harvard street, macadamized.Labor, teaming and materials, furnished by the city, \$1,857 19

Grampian way.

Labor, teaming and materials, furnished by the city,	<u>\$438 96</u>
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New edgestones and sidewalks.

Labor, teaming and materials, furnished by the city,	\$1,248 45
Amount paid to J. B. O'Rourke, paving	151 69
Amount paid to James Dolan, paving	428 48
	<u>\$1,828 62</u>

Park street, Spencer street to New England Railroad, and Geneva avenue to N. Y., N. H. & H. R.R., resurfaced.

Labor, teaming and materials, furnished by the city,	\$2,360 54
Amount paid to John McMorro, retaining wall . .	60 00
Amount paid to James Dolan, paving	148 75
	<u>\$2,569 29</u>

Amount paid out of appropriation for Street Improvements, Ward 20	\$1,412 06
Amount paid out of appropriation for Street Improvements, Ward 24	1,157 23
	<u>\$2,569 29</u>

Savin Hill avenue.

Labor, teaming and materials, furnished by the city,	<u>\$192 60</u>
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Topliff street, macadamized.

Labor, teaming and materials, furnished by the city,	<u>\$725 84</u>
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Washington street, Blue Hill avenue to Centre street, macadamized.

Labor, teaming and materials, furnished by the city,	\$2,738 41
Amount paid out of appropriation for Street Improvements, Ward 20	\$776 53
Amount paid out of appropriation for Street Improvements, General	1,961 88
	<u>\$2,738 41</u>

Westville street, Bowdoin street to Geneva avenue, macadamized.

Labor, teaming and materials, furnished by the city,	<u>\$2,393 28</u>
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STREET IMPROVEMENTS, WARD 21.

Artificial stone sidewalks.

Amount allowed on artificial stone sidewalks	<u>\$56 82</u>
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Bower street, macadamized and regulated.

Labor, teaming and materials, furnished by the city,	\$2,107 72
Amount paid to McCourt & Gilligan, paving	1,256 81

 \$3,364 53

 Amount paid out of appropriation for
 street Improvements, Ward 21 . . \$2,573 20

 Amount paid out of appropriation for
 Street Improvements, General . . 791 33

 \$3,364 53
Cedar street, regulated.

Labor, teaming and materials, furnished by the city,	\$133 74
Amount paid to McCourt and Gilligan, paving	334 20

 \$467 94
Circuit street, near corner Washington street, regulated.

Labor, teaming and materials, furnished by the city,	\$272 41
Amount paid to John McCourt, paving	207 36

 \$479 77
Edgewood street, resurfaced and regulated,

Labor, teaming and materials, furnished by the city,	\$1,171 25
Amount paid to John McCourt, paving	895 90

 \$2,067 15
New edgestones and sidewalks.

Labor and materials, furnished by the city	\$201 20
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Thornton street.

Material, furnished by the city	\$19 30
Amount paid to John McCourt, paving	56 77

 \$76 07
Townsend street.

Labor, teaming and materials, furnished by the city	\$35 85
Amount paid to John McCourt, paving	42 00

 \$77 85

STREET IMPROVEMENTS, WARD 22.

Bickford street.

Labor, teaming and materials, furnished by the city	\$137 25
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Boylston avenue, Boylston to Green street, macadamized and regulated.

Labor, teaming and materials, furnished by the city	\$5,133 59
Amount paid to James Dolan, paving	728 92
	\$5,862 51

Brookside avenue.

Labor, teaming and materials, furnished by the city	\$318 50

Centre street, Day to Eliot street, resurfaced.

Labor, teaming and materials, furnished by the city	\$4,212 86
Amount paid out of appropriation for Street Improvements, Ward 22	\$2,106 43
Amount paid out of appropriation for Street Improvements, Ward 23	2,106 43
	\$4,212 86

Concrete sidewalks.

Amount paid to Simpson Bros. Corp., concreting, ...	\$1,122 00

New edgestones and sidewalks.

Labor, teaming and materials, furnished by the city	\$639 55
Amount paid to James Dolan, paving	138 75
	\$778 30

Sheridan street, Centre street to Chestnut avenue, macadamized and regulated.

Labor, teaming and materials, furnished by the city, ...	\$1,530 57
Amount paid to James Dolan, paving	149 50
	\$1,680 07

Washington street, at Columbus avenue, repaved.

Labor, teaming and materials, furnished by the city, ...	\$375 50
Amount paid to James Dolan, paving	579 82
	\$955 32

Wyman street, edgestones and sidewalks.

Amount allowed on artificial stone sidewalks	\$28 56
Sand	1 70
Amount paid to James Dolan, paving	95 65
	\$125 91

STREET IMPROVEMENTS, WARD 23.

Concrete sidewalks.

Teaming	\$22 50
Amount paid to Simpson Bros. Corp., concreting	554 20
	\$576 70

Eliot street, Centre to Pond street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$502 78

Kittredge street, Washington to Albano street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$719 17

New edgestones and sidewalks.

Labor	\$76 00
Amount paid to James Dolan, paving	288 11
	\$364 11

South street, Walter to Centre street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$1,220 52

Walk Hill street, Harvard street to Hyde Park avenue, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$2,561 98

Washington street, Green to Morton street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city, ...	\$3,328 07

Weld street, Centre to Corey street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$1,922 15

STREET IMPROVEMENTS, WARD 24.

Adams street, Gibson to Park street, paved with large granite blocks and regulated.

Labor, teaming and materials, furnished by the city, ...	\$3,001 35
Amount paid to James Dolan, paving	391 68
	\$3,393 03

Artificial stone sidewalks.

Amount allowed on artificial stone sidewalks	\$40 08

Gibson street, resurfaced.

Labor, teaming and materials, furnished by the city, ...	\$1,005 51

King street, granolithic sidewalks.

Amount paid to W. A. Murtfeldt Company, granolithic sidewalks	\$201 12
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Marsh street, resurfaced.

Labor, teaming and materials, furnished by the city,	\$395 34
Amount paid out of appropriation for Street Improvements, Ward 24 . .	\$312 95
Amount paid out of appropriation for Paving Division	82 39
	<u>\$395 34</u>

Neponset avenue, Adams to Minot street, macadamized and regulated.

Labor, teaming and materials, furnished by the city,	\$7,308 20
Amount paid to James Dolan, paving	969 20
	<u>\$8,277 40</u>
Amount paid out of appropriation for Street Improvements, Ward 24 . .	\$5,276 10
Amount paid out of appropriation for Street Improvements, General . .	3,001 30
	<u>\$8,277 40</u>

Norfolk street, Washington to Nelson street, resurfacing.

Labor, teaming and materials, furnished by the city,	<u>\$1,206 90</u>
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STREET IMPROVEMENTS, WARD 25.

Allston station.

Amount paid to Geo. H. Curtis, putting up iron fence	<u>\$349 50</u>
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Artificial stone sidewalks.

Amount allowed on artificial stone sidewalks	<u>\$336 00</u>
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Dustin street, resurfaced.

Labor, teaming and materials, furnished by the city,	\$534 89
Amount paid to Geo. H. Wentworth & Co., paving,	195 10
	<u>\$729 99</u>

Franklin street, Lincoln street to Fern street, resurfaced and regulated.

Labor, teaming and materials, furnished by the city,	\$1,974 71
Amount paid to Geo. H. Wentworth & Co., paving,	306 06
	<u>\$2,280 77</u>

Kinross road.

Labor, teaming and materials, furnished by the city,	\$91 49
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Lanark road.

Labor, teaming and materials, furnished by the city,	\$399 15
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*SUMMARY OF EXPENDITURES UNDER
SPECIAL APPROPRIATIONS.*

TOTAL AMOUNT EXPENDED.

Albany street, in front of Homœopathic Hospital .	\$1,222 00
Alford street	10,312 02
Atlantic street, Ward 15	2,080 18
Beacham street	5,655 54
Brighton avenue	1,072 91
Brooks street, Ward 25	3,000 00
Cabot street	207 52
Carleton street, Ward 10	208 09
Centre street (Dorchester)	5,181 53
Dorchester avenue, D to Dorchester street	4,580 53
Dudley street	4,032 46
Freeport street	6,372 98
Hull street	7,024 21
North Margin street	152 89
Quincy street, Ward 4 (now St. Martin street)	277 71
Rand street	2,855 95
Washington street (Dorchester)	107 30
Abolishment of grade crossings : Congress and L streets	6,905 37
Charlestown bridge	14,712 61
Rapid Transit : Tremont street, Boylston to Beacon, and Beacon to Scollay square	2,054 80
South Union Station : Atlantic avenue and Dewey square	23,960 34
Dorchester avenue	35,163 46
Summer street	19,552 37
Street Improvements, General : Adams, Haymarket and Scollay squares	1,236 37
Beacon street, Dartmouth to Exeter street	633 90
Brattle street	3,549 65
Commercial street	8,819 49
Hayward place	2,022 00
Howard street	6,377 92
Kilby street	6,949 00
Massachusetts avenue	250 00

Carried forward,

\$186,531 10

<i>Brought forward,</i>	\$186,531 10
Tremont street, Boylston to Pleasant street, and Shawmut avenue, Tremont street to Pleasant street	40,507 19
Tremont street, Weston to Hammond street . .	24,710 62
Street Improvements, Ward 1 :	
Breed street	981 18
Eutaw street	438 85
Maverick street	12 50
Meridian street	3,508 74
Morris street	916 56
Paris street	22 50
Pope street	119 67
Street Improvements, Ward 2 :	
London street	53 20
Marginal street	878 11
Maverick street	385 96
Meridian street	4,838 35
Paris street	125 20
Street Improvements, Ward 3 :	
Bainbridge street	28 73
Bunker Hill street	29,265 81
Green street	486 87
Hancock street	20 72
Hull street	401 99
Marion street	1,283 20
Princeton street	436 01
Vine, Tufts, Moulton and Corey streets . .	861 00
Street Improvements, Ward 4 :	
Arlington avenue	415 98
Baldwin street	385 19
Dorrance street	356 16
Main street	615 72
Mill street	959 45
Perkins street	1,975 52
St. Martin street	310 00
Sullivan street	926 86
West street	180 17
Street Improvements, Ward 5 :	
Boyle street	20 00
Call street	435 99
Chestnut street	2,154 12
Harvard street	201 52
Joiner street	1,637 73
Lynde street	10 00
Miller street	582 40
Putnam street	309 55
Washington street	798 00

Carried forward,

\$309,088 42

<i>Brought forward,</i>	\$309,088 42
Street Improvements, Ward 6 :	
Atlantic avenue	2,957 06
Bartlett place	357 26
Beacon street	968 09
Bulfinch street	725 82
Congress street	405 29
Cooper street	62 99
Hanover street	13,186 58
Lime alley	63 00
Margaret street	821 48
North street	701 77
Sheafe street	3,613 51
Somerset street	100 50
State street	276 25
Unity street	74 97
Water street	612 69
Wiget street	35 52
Street Improvements, Ward 7 :	
Atlantic avenue	273 17
Avery street	693 18
Boylston street, Washington street to Park square	342 49
Congress street, Atlantic avenue to bridge	2,365 36
Exeter place	277 01
Hollis and other streets	602 98
Lagrange street	55 92
Mason street	93 88
Tyler street, Broadway to Beach street	10,260 29
Washington street, Eliot street to the bridge	504 30
Winthrop square	171 28
Street Improvements, Ward 8 :	
Bowdoin street	429 46
Bowdoin street, Cambridge to Allston street, ...	1,973 93
Brighton street	3,942 35
Bulfinch street	56 50
Chambers street	21 93
Charles street, Cambridge to Leverett street	1,803 18
Derne street	56 00
Eaton street	1,727 33
Fruit street	633 54
Leverett street	434 82
Lynde street	1,227 52
Myrtle street	102 60
N. Russell street	311 36
Parkman street	3,792 64
Staniford street	680 54
Willard street	2,680 96

Carried forward,

\$369,565 72

<i>Brought forward,</i>	\$369,565 72
Street Improvements, Ward 9 :	
Asylum street	325 00
Bradford street	195 05
Cobb street	149 37
Dedham street	4,729 63
Harrison avenue, at Dover street	488 40
Malden street	1,000 62
Mayo street	63 41
Pelham street	132 74
Plympton street	4 00
Shawmut avenue	6,321 23
Upton street	3,065 03
Washington street, Eliot to Dover street	570 14
Washington street, Dover to Waltham street	530 35
Waterford street	377 69
Street Improvements, Ward 10 :	
Artificial stone sidewalks	172 32
Belvidere street	828 23
Berwick park	3,053 59
Fayette street	4,613 47
Irvington street	569 52
Melrose street	3,528 33
New edgestone and sidewalks	157 41
Street Improvements, Ward 11 :	
Beacon street	5,406 78
Boylston street	593 22
Street Improvements, Ward 12 :	
Camden street, Washington to Northfield street, ...	2,451 38
Camden street, Tremont street to Columbus	
avenue	1,751 32
Columbus avenue	2,021 72
Concord square	42 47
Concord street	1,625 86
East Lenox street	460 25
East Newton street	1,946 85
Greenwich park	96 30
Lincoln place	46 82
Massachusetts avenue	676 29
Northampton street	862 17
Wellington street	1,502 90
Street Improvements, Ward 13 :	
B street	3,604 59
Broadway	587 44
Congress street	1,498 76
D street	27 00
Dorchester avenue	255 90
Gold street	1,196 90
Third street	1,134 06
<i>Carried forward,</i>	\$428,230 23

<i>Brought forward,</i>	\$428,230 23
Street Improvements, Ward 14 :	
Broadway, at Lincoln School	881 50
Broadway, Dorchester street to St. John's Church	1,595 52
East First street	18 00
East Fourth street	3,443 79
East Seventh street, L to M street	982 26
East Seventh street, M to N street	1,879 22
Emerson street	97 00
Fifth street, I to K street	2,391 00
Jay street	291 54
L street	6 00
Ninth street	43 50
O street	119 51
Street Improvements, Ward 15 :	
Artificial stone sidewalks	264 02
Broadway, E to Dorchester street	2,135 01
Dorchester avenue	126 73
E street	89 55
Eighth street	9 00
Fourth street	139 38
Gates street	142 02
Gold street	338 42
Loring street	510 60
Mercer street	497 05
Middle street	1,693 04
Newman street	513 45
Story street	5,640 23
Woodward street	1,863 90
Street Improvements, Ward 16 :	
Andrew square	1,739 45
Boston street	194 20
Clifton street	571 19
Dacia street	284 50
Dorchester avenue	1,194 22
East Cottage street	990 70
Hartford street	2,844 74
Howard avenue	1,006 80
Ingleside street	197 39
Judson street	135 50
Julian street	69 00
Locust street	221 29
Massachusetts avenue	215 80
Mt. Vernon street	174 90
Preble street	36 40
Quincy street	80 00
Sargent street	1,084 69
<i>Carried forward,</i>	\$464,982 24

<i>Brought forward,</i>	\$464,982 24
Swett street	649 98
Wayland street	1,540 46
Willow court	267 48
Street Improvements, Ward 17 :	
Ambrose street	754 18
Dearborn street	215 70
Massachusetts avenue	14 30
Norfolk avenue	8,727 45
Washington street	527 37
Webber street	478 72
Winthrop street	258 51
Street Improvements, Ward 18 :	
Camden street	4,600 32
Calumet street	77 80
Sterling street	161 50
Terry street	6 00
Tremont street	530 86
Vernon street	8,105 85
Warren street	55 80
Washington street	9 00
Street Improvements, Ward 19 :	
Burney street	21 65
Calumet street	177 14
Conant street	4,569 14
Heath street	82 65
Longwood avenue	39 98
Parker street	6,650 41
Tremont street	102 47
Vernon street	10 80
Wait street	893 10
Street Improvements, Ward 20 :	
Artificial stone sidewalks	591 92
Elmo street	1,178 55
Glenway street	1,857 19
Grampian way	438 96
New edgestones and sidewalks	1,828 62
Park street	2,569 29
Savin Hill avenue	192 60
Topliff street	725 84
Washington street	2,738 41
Westville street	2,393 28
Street Improvements, Ward 21 :	
Artificial stone sidewalks	56 82
Bower street	3,364 53
Cedar street	467 94
Circuit street	479 77
<i>Carried forward,</i>	\$523,394 58

<i>Brought forward,</i>	\$523,394 58
Edgewood street	2,067 15
New edgestones and sidewalks	201 20
Thornton street	76 07
Townsend street	77 85
Street Improvements, Ward 22 :	
Bickford street	137 25
Boylston avenue	5,862 51
Brookside avenue	318 50
Centre street	4,212 86
Concrete sidewalks	1,122 00
New edgestones and sidewalks	778 30
Sheridan street	1,680 07
Washington street	955 32
Wyman street	125 91
Street Improvements, Ward 23 :	
Concrete sidewalks	576 70
Eliot street	502 78
Kittredge street	719 17
New edgestone and sidewalks	364 11
South street	1,220 52
Walk Hill street	2,561 98
Washington street	3,328 07
Weld street	1,922 15
Street Improvements, Ward 24 :	
Adams street	3,393 03
Artificial stone sidewalks	40 08
Gibson street	1,005 51
King street	201 12
Marsh street	395 34
Neponset avenue	8,277 40
Norfolk street	1,206 90
Street Improvements, Ward 25 :	
Allston street	349 50
Artificial stone sidewalks	336 00
Dustin street	729 99
Franklin street	2,280 77
Kinross road	91 49
Lanark road	399 15
	\$570,911 33
Less amount paid out of appropriation for Paving Division	2,705 00
	<u>\$568,206 33</u>

BLUE HILL AND OTHER AVENUES.

Blue Hill avenue, Grove Hall to Walk Hill street.

Labor, teaming and materials, furnished by the city,	\$4,083 90
Amount paid to Metropolitan Construction Company, building retaining wall	1,347 00
Amount paid to Doherty & Connors, construction work	309 12
	\$5,740 02

Blue Hill avenue, Walk Hill street to Mattapan.

Labor, teaming and materials, furnished by the city,	\$889 93
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Columbus avenue.

Labor, teaming and materials, furnished by the city,	\$114,282 24
Amount paid to Jones & Meehan, paving	40,909 48
Amount paid to D. E. Lynch, paving	3,035 98
Amount paid to James Dolan, paving	543 45
Amount paid to William Hennessey, building retaining wall	665 00
Amount paid to James T. Gilligan, filling	1,547 40
Amount paid to J. P. Niland, filling	448 20
Amount paid to P. F. Donovan, labor and stone,	2,139 99
	* \$163,601 74

Commonwealth avenue.

Labor, teaming and materials, furnished by the city,	\$71,418 33
Amount paid to Michael Kiernan, quarrying and cutting stone	10,434 87
Amount paid to A. McMurtry & Sons, quarrying and cutting stone	2,324 10
	\$84,177 30

Commonwealth avenue, Chestnut Hill avenue to Newton line.

Labor, teaming and materials, furnished by the city,	\$1,113 30
Amount paid to J. A. Whittemore's Sons, construction work	31 22
	\$1,144 52
Amount paid out of Blue Hill and other avenues	\$1,113 30
Amount paid out of Laying Out and Construction of Highways	31 22
	\$1,144 52

* Includes \$13,751.87 paid by Boston Elevated Railway Company and others.

*SUMMARY OF EXPENDITURES FOR BLUE
HILL AND OTHER AVENUES.*

Blue Hill avenue, Grove Hall to Walk Hill street .	\$5,740 02
Blue Hill avenue, Walk Hill street to Mattapan .	889 93
Columbus avenue	163,601 74
Commonwealth avenue	84,177 30
Commonwealth avenue, Chestnut Hill avenue to Newton line	1,144 52
	\$255,553 51
Less amount paid out of appropriation for Laying Out and Construction of Highways	31 22
	<u>\$255,522 29</u>

*LAYING OUT AND CONSTRUCTION OF
HIGHWAYS.*

Amory street.

Labor and advertising	<u>\$28 50</u>
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Angell street.

Labor and advertising	<u>\$52 63</u>
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Ashley street.

Labor	<u>\$12 50</u>
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Astor street.

Labor and advertising	<u>\$39 99</u>
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Athelwold street, between School and Kilton streets,
Amount retained from Collins & Ham, for work
done in 1897, under contract

\$185 17

Belmore terrace, between Boylston street and Boylston terrace.

Labor, teaming and materials, furnished by the city,	\$2,084 68
Amount paid to Patrick O'Hara & Co., construc- tion work	1,743 44
	<u>\$3,828 12</u>

Belvidere street.

Labor and advertising	<u>\$293 00</u>
---------------------------------	-----------------

Bernard street, between Harvard street and Talbot avenue.

Labor, teaming and materials, furnished by the city,	\$6,757 89
Amount paid to J. A. Whittemore's Sons, con- struction work.	3,031 58
	<u>\$9,789 47</u>

Bloomfield street, between Geneva avenue and Greenbrier street.

Amount retained from Collins & Ham, for work done in 1897, under contract	\$87 85
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Burt street, between Washington and Ashmont streets.

Labor, teaming and materials, furnished by the city,	\$3,792 69
Amount paid to Collins & Ham, construction work,	1,956 21
	<u>\$5,748 90</u>

Callender street.

Labor.	<u>\$11 00</u>
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Canal street, between Haymarket square and Causeway street.

Labor, teaming and materials, furnished by the city,	\$9,013 56
Amount paid to Jones & Meehan, construction work	7,395 76
	<u>* \$16,409 32</u>

Carlos street, between Lãuriat and Chapman avenues.

Labor, teaming and materials furnished by the city,	\$1,514 37
Amount paid to Patrick O'Hara & Co., construction work	630 10
	<u>\$2,144 47</u>

Chamberlain street, between Harvard and Algonquin streets.

Amount retained from Collins & Ham, for work done in 1897, under contract	<u>\$69 86</u>
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Chamblet street, between Magnolia and Hartford streets.

Labor, teaming and materials, furnished by the city,	\$1,478 52
Amount paid to John Connors, construction work,	1,085 02
	<u>\$2,563 54</u>

Charlestown street.

Labor.	<u>\$4 50</u>
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Chiswick road.

Labor	<u>\$45 00</u>
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* Includes \$3,110.30 paid by Boston Elevated Railway Company.

Columbia road.

Labor, teaming and materials, furnished by the city	\$85,104 12
Amount paid to H. P. Nawn, construction work between Blue Hill avenue and Stanwood street, ...	32,175 32
Amount paid to H. P. Nawn, construction work between Stanwood and Glendale streets	26,487 58
Amount paid to J. McGraw & Co., construction work between Glendale street and Edward Everett square	6,603 11
Amount paid to D. F. O'Connell, abutments and pier of bridge	5,375 40
Amount paid to Simon J. Donovan, filling	5,590 03
Amount paid to J. J. Sullivan, filling	2,932 56
Amount paid to F. J. Hannon, filling	2,274 40
Amount paid to J. S. Jacobs & Son, filling	727 09
Amount paid to R. J. Johnson, filling	722 50
	\$167,992 11

Devon street.

Labor	\$19 75
-----------------	---------

Elizabeth street, between Norfolk and Astoria streets.

Labor, teaming and materials, furnished by the city	\$1,527 18
Amount paid to Collins & Ham, construction work, ...	617 33
	\$2,144 51

Ellet street, between Adams street and Dorchester avenue.

Amount retained from H. Gore & Co., for work done in 1897, under contract	\$56 96
---	---------

Engineering Expenses

\$1,077 45
Fairmount street, between Washington and Morton streets.

Labor, teaming and materials, furnished by the city	11,056 37
Amount paid to James McGovern, construction work	5,719 66
	\$16,776 03

Fenelon street, between Washington and Merrill streets.

Amount retained from D. E. Lynch, for work done in 1896, under contract	\$120 86
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Forest Hills street.

Labor and advertising	\$43 37
---------------------------------	---------

Fowler street.

Labor and advertising	\$43 45
---------------------------------	---------

Francis street.

Labor and advertising	\$52 86
---------------------------------	---------

Fullerton street, between Brookline avenue and Fairhaven street.

Amount retained from Philip Doherty, for work done in 1897, under contract	\$116 69
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Gaylord street, between Washington & Chamberlain streets.

Amount retained from Doherty & Connors, for work done in 1897, under contract	\$47 10
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Geneva avenue, between Westville street and Dorchester avenue.

Amount retained from Finneran & O'Hearn, for work done in 1897, under contract	\$329 81
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Greenbrier street, between Bloomfield and Park streets.

Amount retained from H. Gore & Co., for work done in 1897, under contract	\$139 83
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Hamilton street, between Bowdoin street and Homes avenue.

Labor, teaming and materials, furnished by the city,	\$1,135 49
Amount paid to D. M. Dwyer, excavating	763 19
Amount paid to James McGovern, construction work	481 48
	<u>\$2,380 16</u>

Harold street.

Labor, teaming and materials, furnished by the city,	\$423 86
--	----------

Hewins street, between Columbia road and Erie street.

Labor, teaming and materials, furnished by the city,	\$2,783 59
Amount paid to Philip Doherty, construction work,	1,064 88
	<u>\$3,848 47</u>

Idaho street.

Labor	\$31 50
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Ipswich street, between Boylston road and Boylston street.

Labor, teaming and materials, furnished by the city,	\$4,649 99
Amount paid to Holbrook, Cabot & Daly, retaining walls, abutments and piers	37,221 70
Amount paid to Boston & Albany Railroad Company, filling	2,706 57
Amount paid to James Russell Boiler Works Company, iron fences	889 00
	<u>\$45,467 26</u>

Jersey street, between Audubon road and Brookline avenue.

Labor, teaming and materials, furnished by the city,	\$914 70
Amount paid to Boston & Albany Railroad Company, filling	18,817 47
	<u>\$19,732 17</u>

Leeds street.

Labor and advertising	<u>\$43 40</u>
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Leedsville street, between Dorchester avenue and Adams street.

Labor, teaming and materials, furnished by the city,	\$2,747 34
Amount paid to Collins & Ham, construction work,	1,619 93
	<u>\$4,367 27</u>

Leroy street, between Geneva avenue and Ditson street.

Labor, teaming and materials, furnished by the city,	\$2,568 39
Amount paid to Barnes-Ruffin Company, artificial stone sidewalks	1,457 07
Amount paid to Philip Doherty, construction work,	941 39
	<u>\$4,966 85</u>

Lonsdale street, between Dorchester avenue and Adams street.

Labor, teaming and materials, furnished by the city,	\$6,084 53
Amount paid to Barnes-Ruffin Company, construction work	2,241 73
Amount paid to Barnes-Ruffin Company, artificial stone sidewalks	378 88
Amount paid to J. C. Newborg, artificial stone sidewalks	287 68
	<u>\$8,992 82</u>

Malvern street, between Brighton avenue and Ashford street.

Labor, teaming and materials, furnished by the city,	\$2,639 39
Amount paid to James Doherty & Co., construction work	1,606 65
	<u>\$4,246 04</u>

Maryland street, between Savin Hill avenue and Bay street.

Labor, teaming and materials, furnished by the	
city	\$971 69
Amount paid to Philip Doherty, construction work,	273 69
	<u>\$1,245 38</u>

Mellen street, between Ocean and Montague streets.

Labor, teaming and materials, furnished by the	
city	\$3,009 60
Amount paid to Collins & Ham, construction work,	2,215 01
	<u>\$5,224 61</u>

Merlin street, between Athelwold and Park streets.

Labor, teaming and materials, furnished by the	
city	\$415 22
Amount paid to Patrick McGovern, construction	
work	1,345 61
	<u>\$1,760 83</u>

Middleton street.

Labor and advertising	<u>\$43 00</u>
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Millet street.

Labor and advertising	<u>\$25 60</u>
-----------------------	----------------

Morse street, between Washington and Bowdoin avenue.

Amount retained from Doherty & Connors, for work	
done in 1897, under contract	<u>\$98 32</u>

Newburg street.

Labor	<u>\$18 00</u>
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Nightingale street, between Talbot avenue and Bernard street.

Labor, teaming and materials, furnished by the	
city	\$5,579 03
Amount paid to James Doherty & Co., paving	3,495 49
	<u>\$9,074 52</u>

North Harvard street, between Western avenue and Charles river.

Labor, teaming and materials, furnished by the	
city	\$13,301 96
Amount paid to Geo. H. Wentworth & Co., construction work	10,565 99
	<u>\$23,867 95</u>

Norway street, between Massachusetts avenue and Parker street.

Amount retained from Doherty & Connors, for work done in 1897, under contract	\$166 35
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Oakley street, between Bowdoin street and Geneva avenue.

Labor, teaming and materials, furnished by the city	\$3,325 50
Amount paid to John Connors, construction work, ...	1,260 66
Amount paid to John C. Newborg, artificial stone sidewalks	2,022 17
	<u>\$6,608 33</u>

Peterborough street, between Audubon road and Fairhaven street.

Labor and advertising	\$29 40
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Peverell street, between Sawyer avenue and Salcombe street.

Labor, teaming and materials, furnished by the city, ...	\$1,411 81
Amount paid to Collins & Ham, construction work, ...	1,128 30
	<u>\$2,540 11</u>

Queensbury street, between Audubon road and Fairhaven street.

Labor, teaming and materials, furnished by the city, ...	\$446 11
Amount paid to Boston and Albany Railroad Company, filling	12,582 54
	<u>\$13,028 65</u>

Rosseter street, between Bullard street and Bowdoin avenue.

Labor, teaming and materials, furnished by the city, ...	\$4,707 41
Amount paid to Patrick O'Hara & Co., construction work	\$1,668 39
Amount paid to R. L. Barrett, building retaining walls and fences	800 70
	<u>\$7,176 50</u>

Ruggles street, between Parker street and Back Bay Fens.

Labor, teaming and materials, furnished by the city, ...	\$4,980 60
Amount paid to Doherty & Connors, construction work	4,261 32
Amount paid to James T. Gilligan, stone	370 50
	<u>\$9,612 42</u>

School street.

Removing trees, etc.	\$125 00
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Shirley street.

Labor	\$14 50
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Spencer street, between Wheatland and Talbot avenues.

Labor, teaming and materials, furnished by the city,	\$531 45
Amount paid to James McGovern, construction work	195 11
	<u>\$726 56</u>

Stanley street.

Labor	\$7 62
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St. Stephen street, from Bryant street 803 feet northeasterly.

Labor, teaming and materials, furnished by the city,	\$1,599 93
Amount paid to James T. Gilligan, filling	1,076 20
	<u>\$2,676 13</u>

Stuart street, between Dartmouth street and Trinity place.

Labor, teaming and materials, furnished by the city,	\$995 73
Amount paid to Collins & Ham, construction work,	728 67
	<u>\$1,724 40</u>

Telford street, between Western avenue and Charles river reservation.

Labor, teaming and materials, furnished by the city,	\$1,219 01
Amount paid to James Doherty & Co., construction work	540 50
	<u>\$1,759 51</u>

Thane street.

Labor	\$7 38
-----------------	--------

Tonawanda street, between Geneva avenue and Greenbrier street.

Labor, teaming and materials, furnished by the city	\$7,411 05
Amount paid to Philip Doherty, construction work,	4,456 46
	<u>\$11,867 51</u>

Turner street, between Haviland and Astor streets.

Amount paid to Doherty & Connors, construction work	\$185 71
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Vancouver street, between Huntington avenue and Ruggles street.

Labor, teaming and materials, furnished by the city,	\$1,326 56
Amount paid to Doherty & Connors, construction work	1,139 08
	<u>\$2,465 64</u>

Van Winkle street.

Labor and advertising	<u>\$19 65</u>
---------------------------------	----------------

Waterlow street, between Harvard and Harvard streets.

Labor, teaming and materials, furnished by the city	\$2,336 88
Amount paid to James Doherty & Co., construction work	1,140 44
	<u>\$3,477 32</u>

Wensley street.

Labor and advertising	<u>\$57 75</u>
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West Selden street.

Labor, teaming and materials, furnished by the city	<u>\$531 96</u>
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Wolcott street, between Columbia road and Erie street.

Artificial stone sidewalks	\$89 76
Amount retained from Collins & Ham, for work done in 1897 under contract	73 86
	<u>\$163 62</u>

Woodlawn street.

Labor and advertising	<u>\$15 38</u>
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Public alley 401.

Materials, furnished by the city	<u>\$138 27</u>
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Public alley 402.

Labor and materials, furnished by the city	<u>\$117 27</u>
--	-----------------

Public alley 403.

Labor, teaming and materials, furnished by the city	<u>\$47 40</u>
---	----------------

Public alley 404.

Labor, teaming and materials, furnished by the city	<u>\$1,064 76</u>
---	-------------------

Public alley 437.

Labor, teaming and materials, furnished by the city	\$161 09
Amount paid to the Barber Asphalt Paving Company, asphaltting	1,626 81
	\$1,787 90

Public alley 701.

Labor, printing and advertising	\$43 94
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SUMMARY OF EXPENDITURES.

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS.

TOTAL AMOUNT EXPENDED.

Commonwealth avenue	\$31 22
Amory street	28 50
Angell street	52 63
Ashley street	12 50
Astor street	39 99
Athelwold street	185 17
Belmore terrace	3,828 12
Belvidere street	293 00
Bernard street	9,789 47
Bloomfield street	87 85
Burt street	5,748 90
Callender street	11 00
Canal street	16,409 32
Carlos street	2,144 47
Chamberlain street	69 86
Chamblet street	2,563 54
Charlestown street	4 50
Chiswick road	45 00
Columbia road	167,992 11
Devon street	19 75
Elizabeth street	2,144 51
Ellet street	56 96
Engineering expenses	1,077 45
Fairmount street	16,776 03
Fenelon street	120 86
Forest Hills street	43 37
Fowler street	43 45
Francis street	52 86
Fullerton street	116 69
Gaylord street	47 10
Geneva avenue	329 81

Carried forward,

\$230,165 99

<i>Brought forward,</i>							\$230,165 99
Greenbrier street	.	.	.	.	.	.	139 83
Hamilton street	.	.	.	.	.	.	2,380 16
Harold street	.	.	.	.	.	.	423 86
Hewins street	.	.	.	.	.	.	3,848 47
Idaho street	.	.	.	.	.	.	31 50
Ipswich street	.	.	.	.	.	.	45,467 26
Jersey street	.	.	.	.	.	.	19,732 17
Leeds street	.	.	.	.	.	.	43 40
Leedsville street	.	.	.	.	.	.	4,367 27
Leroy street	.	.	.	.	.	.	4,966 85
Lonsdale street	.	.	.	.	.	.	8,992 82
Malvern street	.	.	.	.	.	.	4,246 04
Maryland street	.	.	.	.	.	.	1,245 38
Mellen street	.	.	.	.	.	.	5,224 61
Merlin street	.	.	.	.	.	.	1,760 83
Middleton street	.	.	.	.	.	.	43 00
Millet street	.	.	.	.	.	.	25 60
Morse street	.	.	.	.	.	.	98 32
Newburg street	.	.	.	.	.	.	18 00
Nightingale street	.	.	.	.	.	.	9,074 52
North Harvard street	.	.	.	.	.	.	23,867 95
Norway street	.	.	.	.	.	.	166 35
Oakley street	.	.	.	.	.	.	6,608 33
Peterborough street	.	.	.	.	.	.	29 40
Peverell street	.	.	.	.	.	.	2,540 11
Queensbury street	.	.	.	.	.	.	13,028 65
Rosseter street	.	.	.	.	.	.	7,176 50
Ruggles street	.	.	.	.	.	.	9,612 42
School street	.	.	.	.	.	.	125 00
Shirley street	.	.	.	.	.	.	14 50
Spencer street	.	.	.	.	.	.	726 56
Stanley street	.	.	.	.	.	.	7 62
St. Stephen street	.	.	.	.	.	.	2,676 13
Stuart street	.	.	.	.	.	.	1,724 40
Telford street	.	.	.	.	.	.	1,759 51
Thane street	.	.	.	.	.	.	7 38
Tonawanda street	.	.	.	.	.	.	11,867 51
Turner street	.	.	.	.	.	.	185 71
Vancouver street	.	.	.	.	.	.	2,465 64
Van Winkle street	.	.	.	.	.	.	19 65
Waterlow street	.	.	.	.	.	.	3,477 32
Wensley street	.	.	.	.	.	.	57 75
West Selden street	.	.	.	.	.	.	531 96
Wolcott street	.	.	.	.	.	.	163 62
Woodlawn street	.	.	.	.	.	.	15 38
Public Alley 401	.	.	.	.	.	.	138 27
" " 402	.	.	.	.	.	.	117 27

Carried forward,

\$431,406 77

<i>Brought forward,</i>		\$431,406 77
Public Alley 403		47 40
" " 404		1,064 76
" " 437		1,787 90
" " 701		43 94
		*\$434,350 77

NEW EDGESTONE.

The following tables show the amount of new edgestone set during the year:

CITY PROPER.

*Wards 6, 7, 8, 9, 10, 11, 12, 17 and 18, in whole or in part.
(Paving Districts Nos. 8, 9 and 10.)*

	Lin. ft.
Blackwood street	133
Hereford street	250
Newbury street	126
Northampton street	174
Stuart street	598
	1,281

ROXBURY.

Wards 16, 17, 18, 19, 21 and 22, in whole or in part. (Paving District No. 7.)

	Lin. ft.
Burrell, Batchelder and Marshfield streets	1,052
Columbus avenue, from Centre street to Ritchie street	1,179
Columbus avenue, from Hanley square to Centre street and Centre street, from Columbus avenue to Amory street	7,033
George street	171
Humboldt avenue	149
Ruggles street	1,914
Ruthven street	137
Vancouver street	510
Wabon and Wabeno streets	232
Wait street	256
Sundry streets in small quantities	619
	13,252

* Includes \$31.22 for Blue Hill and other avenues.

DORCHESTER.

Wards 16, 20 and 24, in whole or in part. (Paving District No. 6.)

	Lin. ft.
Bradlee street	180
Bernard street	2,789
Bellevue and Quincy streets	398
Blue Hill avenue and Quincy streets	456
Blue Hill avenue and Lawrence avenue	229
Blue Hill avenue and Stanwood street	495
Burt street	1,700
Carlos street	655
Centre street	460
Chamblet street	972
Columbia road	9,649
Dorchester avenue	109
Dewey street	113
Elizabeth street	619
Elmo street	1,478
Edson street	290
Fairmount street	5,191
Hamilton street	1,250
Hewins street	1,400
Leroy street	1,391
Leedsville street	1,220
Lonsdale street	3,300
Magnolia street	105
Maryland street	800
Mellen street	1,537
Merlin street	945
Milton avenue and Norfolk street	188
McLellan street	234
Nightingale street	2,966
Norfolk street	144
Oakley street	1,748
Peverell street	850
Rosseter street	1,779
Standish street	141
Savin Hill avenue	102
Spencer street	575
Summer street	118
Tonawanda street	1,760
Waterlow street	972
Welles avenue	100
Sundry streets in small quantities	716

 50,124

SOUTH BOSTON.

Wards 13, 14, 15 and 16, in whole or in part. (Paving District No. 1.)

	Lin. ft.
Covington street	450
East Third street	111
Locust street	219
Vale street	325
Sundry streets in small quantities	154
	1,259

EAST BOSTON.

Wards 1 and 2. (Paving District No. 2.)

	Lin. ft.
Morris street	125
Pope street	228
Putnam street	158
Sundry streets in small quantities	407
	918

BRIGHTON.

Ward 25. (Paving District No. 4.)

	Lin. ft.
Commonwealth avenue	218
Gardner street	101
Henshaw street	44
Malvern street	1,388
North Harvard street	3,428
Telford street	730
	5,909

WEST ROXBURY.

Wards 22 and 23, in whole or in part. (Paving District No. 5.)

	Lin. ft.
Belmore terrace	645
Boylston and Adelaide streets	781
Cranston street	387
Keyes street	125
Sundry streets in small quantities	247
	2,185

RECAPITULATION.

	Lin. ft.
City Proper	1,281
Roxbury	13,252
Dorchester	50,124
South Boston	1,259
East Boston	918
West Roxbury	2,185
Brighton	5,909
	74,928

Edgestones.

New Edgestones. (First setting.) Linear feet.

YEAR.	City Proper.	Roxbury.	South Boston.	East Boston.	Dorchester.	West Roxbury.	Brighton.	Charlestown.	Back Bay.	Total.
1891.....	8,236	22,693	11,724	4,131	18,138	4,617	2,032	2,227	.....	73,798
1892.....	9,222	25,506	9,631	11,238	36,859	9,970	9,001	2,804	.....	114,231
1893.....	1,118	14,979	4,372	1,969	10,587	4,795	3,981	.....	.....	41,804
1894.....	1,916	39,324	521	816	6,544	1,568	1,323	694	.....	52,706
1895.....	2,990	17,053	2,097	1,146	15,205	8,319	4,191	668	.....	51,669
1896.....	1,697	20,111	3,855	807	21,367	2,498	8,507	791	41,917	101,550
1897.....	5,097	14,241	2,311	1,691	37,205	5,228	1,086	.....	.....	66,859
1898.....	1,281	13,252	1,259	918	50,124	2,185	5,909	.....	.....	74,928
Totals	31,557	167,159	35,773	22,716	196,029	39,180	36,030	7,184	41,917	577,545

NEW BRICK SIDEWALKS.

The following tables show the number of square yards of brick sidewalks laid during the year :

CITY PROPER.

*Wards 6, 7, 8, 9, 10, 11, 12, 17 and 18, in whole or in part.
(Paving Districts Nos. 8 and 10.)*

	Sq. yds.
Atlantic avenue	1,038
Bay street	165
Boylston street	367
Bothnia street	119
Berwick park	749

Carried forward,

2,438

		Sq. yds.
<i>Brought forward,</i>		2,438
Bowdoin street		360
Dartmouth street		277
Eaton street		205
Fayette street		805
Hull street		847
Melrose street		660
Sheafe street		552
Tyler street		1,017
Parkman street		280
Stuart street		415
Willard street		475
Wellington street		777
West Dedham street		1,013
		10,121

ROXBURY.

Wards 16, 17, 18, 19, 21 and 22, in whole or in part. (Paving District No. 7.)

		Sq. yds.
Ambrose street		430
Batchelder, Burrell and Marshfield streets		330
Bickford street		235
Blue Hill avenue		220
Bower street		1,432
Cedar street		725
Centre street		140
Chadwick street		117
Clifton street		229
Conant street		787
Dearborn street		171
Dudley street		112
Edgewood street		1,200
Elm Hill avenue		152
George street		113
Harrison avenue		192
Highland street		167
Roxbury street		238
Ruthven street		222
Sherman street		204
Tremont street		298
Vernon street		2,749
Warren street		137
Washington street		1,622
Wait street		267
Webber street		310
Sundry streets in small quantities		984
		13,783

SOUTH BOSTON.

Wards 13, 13, 15 and 16 in whole or in part. (Paving District No. 1.)

	Sq. yds.
B street	921
Dorchester avenue	198
East Fourth street	972
East Fifth street	1,063
Loring street	471
Woodward street	862
	4,487

EAST BOSTON.

Wards 1 and 2. (Paving District No. 2.)

	Sq. yds.
Brooks street	189
Decatur street	1,232
Eutaw street	379
Lexington street	257
Meridian street	3,446
Pope street	177
Putnam street	197
Webster street	338
Sundry streets in small quantities	238
	6,453

DORCHESTER.

Wards 16, 20 and 24, in whole or in part. (Paving District No. 6.)

	Sq. yds.
Blue Hill avenue and Quincy street	220
Blue Hill avenue and River street	199
Bowdoin street	278
Dorchester avenue	199
Harvard and Standish streets	143
Pleasant street	127
Stoughton street	294
Thornley street	114
Tonawanda street	2,751
Willis street	203
Sundry streets in small quantites	195
	4,723

WEST ROXBURY.

Wards 22 and 23, in whole or in part. (Paving District No. 5.)

	Sq. yds.
Ashland street	156
Boylston avenue and Boylston street	111
Burroughs street	293
Poplar street	242
Wyman street	197
Sundry streets in small quantities	226
	1,225

CHARLESTOWN.

Wards 3, 4 and 5. (Paving District No. 3.)

	Sq. yds.
Beacham street	218
Call street	250
Chestnut street	1,074
Harvard street	330
Hunter street	126
Main street	237
Marion street	498
Miller street	427
Perkins street	797
Princeton street	570
West street	126
	4,653

BRIGHTON.

Ward 25. (Paving District No. 4.)

	Sq. yds.
Brighton avenue	172
Franklin street	44
	216

RECAPITULATION.

	Sq. yds.
City Proper	10,121
Roxbury	13,783
South Boston	4,487
East Boston	6,453
Dorchester	4,723
West Roxbury	1,225
Charlestown	4,653
Brighton	216
	45,661

New Brick Sidewalks.*First laying. Square yards.*

YEAR.	City Proper.	Roxbury.	South Boston.	East Boston.	Dorchester.	West Roxbury.	Brighton.	Charlestown.	Back Bay.	Total.
1891.....	3,881	9,098	3,628	2,176	1,478	967	377	120	.....	21,725
1892.....	10,423	20,231	4,484	12,847	10,462	2,905	1,068	3,451	.....	65,871
1893.....	964	5,912	751	2,197	2,412	350	.....	175	.....	12,761
1894.....	1,537	11,533	2,706	2,115	453	834	.....	437	.....	19,615
1895..	4,103	6,246	1,946	1,151	2,146	1,734	2,908	408	.....	20,632
1896.....	1,044	15,897	2,314	381	2,616	542	.....	288	5,073	28,155
1897..	17,287	21,596	13,460	16,125	2,995	1,855	2,128	14,454	.....	89,900
1898.....	10,121	13,783	4,487	6,453	4,723	1,225	216	4,653	.....	45,661
Totals.....	49,360	104,296	33,766	43,445	27,285	10,412	6,697	23,986	5,073	304,320

PROPERTY IN CHARGE OF THE DEPUTY SUPERINTENDENT OF PAVING DIVISION.

Buildings and wharf on Albany street, opposite Sharon street. The building is of brick and wood, and covers some 8,000 square feet of land, and is divided into a shed for storage, blacksmith's and carpenter's shops, tool-room and stable. The total contents of the lot, including wharf and building, are 63,180 square feet.

Fort Hill Wharf, containing 21,054 square feet, placed in charge of the Paving Department May 18, 1874, to be used for the landing and storage of paving-blocks and gravel until such time as said wharf shall be wanted for the extension of Oliver street. The greater part of said wharf is occupied by the Sanitary Division as a garbage-dump, and the building thereon is leased to a tenant.

Lot on Chelsea, Marion and Paris streets, East Boston, containing 43,550 square feet. Part of this lot used by the Sewer Division.

Ledge lot on Washington street, corner Dimock street, Roxbury, containing 134,671 square feet. Upon this lot are buildings containing a steam-engine and stone-crusher.

Highland-street stable lot. Upon this lot is a large brick stable, erected in 1873, and occupied by the Sanitary and Paving Divisions; also a brick building used as a blacksmith's shop, and a shed for the storage of tools, etc.

Ledge lot on Codman street, Dorchester, containing 299,000 square feet, was purchased in 1870. Upon this lot is a shed

containing a steam-engine and stone-crusher; also a stable and tool-house.

On the Almshouse lot, Hancock street, Dorchester, there are two stables; also a shed and tool-house.

Ledge lot on Magnolia street and Bird place, Dorchester, containing 81,068 square feet. This lot was purchased by the town of Dorchester in 1867.

Downer-avenue lot, Dorchester, containing 35,300 square feet.

On Child street, West Roxbury, a lot of land containing 43,024 square feet, upon which are a stable and shed, blacksmith's shop, and tool-house.

Gravel lot in the town of Milton, on Brush Hill road, containing 64,523 square feet, hired by the town of Dorchester for 999 years.

Gravel lot on Morton street, Ward 23, containing about one-third of an acre, purchased by the town of West Roxbury in 1870, used for storage purposes.

Ledge and gravel lot, rear of Union street, containing about 37,000 square feet, purchased by the town of Brighton. This lot is at present leased.

Ledge lot on Chestnut Hill avenue, Brighton, containing about thirteen acres, upon which are an office, engine-house, stable and crusher plant.

On Medford street, Charlestown, a wharf lot, foot of Elm street, containing 8,000 feet, upon which are sheds, office, stable, etc.

In South Boston, corner of H and Ninth streets, stable, carriage house, shed, tool-house and office on leased land.

On Hereford street, a yard with shed, tool-house and office.

Wharf, known as Atkin's wharf, 521 Commercial street, purchased in 1887 for \$24,000, containing 22,553 square feet, having on it an office and stable.

On Centre street, West Roxbury, buildings containing engines, stone-crushers, tools, etc., on leased land.

On Rosseter street, Dorchester, buildings containing engines, stone-crushers, tools, etc., on leased land.

On Heath street, Roxbury, buildings containing engines, stone-crushers, tools, etc., on leased land.

On Revere street, wharf for storing paving-blocks, etc.

Wharf on Chelsea street, East Boston, containing 61,000 square feet, with buildings purchased in 1897 for \$15,000.

Streets Laid Out or Extended and Ordered to be Constructed.

DATE.	Street.	Location.	Length. Lin. ft.
Aug. 26,	Alexander st..	Southerly over a private way, called Oleander street.....	602.00
Sept. 30,	Angell st.	From Blue Hill ave. to Canterbury st.	852.60
Oct. 21,	Ashley st.	From Breed street to Walley st..	632.84
Aug. 23,	Atherstone st.	From Fuller st. to Bailey st.....	300.00
Jan. 24,	Blandford st..	From Commonwealth ave. to the B. & A. R.R.	377.15
July 29,	Bragdon st....	From Columbus ave. to Amory st.	608.45
Oct. 3,	Callender st..	From Tucker st. to Don st.....	2,173.59
Oct. 3,	Chester st....	From Brighton ave. to Common- wealth ave.....	620.49
Jan. 24,	Cumming ton st.	From Blandford st. to Avon st..	1,174.64
Aug. 17,	Devon st.....	From Blue Hill ave. to Columbia road.....	1,850.01
Dec. 5,	Florida st....	From King st. to Templeton st..	1,113.95
Sept. 7,	Fowler st....	From Glenway st. to Greenwood st.	855.15
March 2,	Hewins st....	From Columbia road to Erie st..	700.48
Aug. 17,	Homes ave. ..	From Bowdoin st. to Toppliff st..	842.00
April 22,	Hubbard st. ..	From Chestnut ave. to Lamartine st.	434.86
July 15,	Jersey st.	From Brookline ave. to Audubon road.....	1,631.00
July 14,	Leeds st.	From Woodward st. to Dorches- ter ave.	370.25
May 27,	Mellen st.	From Ocean st. to Montague st..	761.14
April 29,	Merlin st.	From Park st. to Athelwold st..	464.90
July 29,	Middleton st..	From Norfolk st.	585.88
	Millet st.	From Park st. to Athelwold st..	468.40
May 16,	Newburg st..	From Beech st. to Belgrade ave.,	1,976.00
Oct. 18,	Orkney road..	From Strathmore road to Suther- land road.....	819.72
March 23,	Park st.	From Centre st. to Montview st.	1,162.02
Nov. 16,	Shafter st....	From Waterlow st. to Faxon st..	733.00
Aug. 18,	Shirley st....	From Norfolk ave., over and in- cluding Bartlett ct., to Massa- chusetts ave.	924.00
May 27,	Spencer st....	From Wheatland ave. to Talbot ave.	620.00
July 17,	Spencer st....	From Park st. to Athelwold st..	465.65
July 14,	Stanley st....	From Quincy st. to Bellevue st..	363.00
Aug. 31,	Stuart st....	From Dartmouth st. to Trinity pl.	260.00
July 7,	Thane st.	From Park st. to Athelwold st..	465.23
March 1,	Telford st....	From Western ave.	349.12
Dec. 5,	Trinity pl....	From St. James st. to Stuart st..	390.00
Aug. 2,	Van Winkle st.	From Dorchester ave. to Shawmut Branch R.R.	759.62
Nov. 9,	Woodcliff st..	Eastwardly from Howard ave....	213.00
			26,921.13

Streets Laid Out or Extended, Construction not Ordered.

DATE.	Street.	Location.	Length, Lin. ft.
Nov. 29,	Bancroft st. ..	From Columbus ave. to West Walnut Park	262.33
Nov. 29,	Ernst st.	From Bragdon st. to West Walnut Park	312.31
April 12,	Hunter st. ...	From Bunker Hill st. to Vine st.	160.23
Nov. 29,	Miles st.	From Bragdon st. to West Walnut Park	262.64
Nov. 29,	West Walnut Park	Extended to Amory st.	665.49
Jan. 26, 1899,	Worthington st.	From Longwood ave. to the Fenway	1,128.00
			2,791.00

Streets Widened and Relocated.

STREET.	Location.	Date.	Widening.	Discontinu- ance.
Amory st.	From School st. to Bragdon st.	July 29,	8,376 sq. ft.	
Adams st.	N. E. side, cor. Park st.	Oct. 21,	212 "	
Canal st.	{ Haymarket sq. to Causeway st. ...	Aug. 10,	24,890 "	
Charlestown st.	{ .....	.....	30,349 "	
Francis st.	Huntington ave. to Brookline ave.	July 13,	15,985 "	
Forest Hills st.,	Washington st., at Glen road.	Aug. 10,	4,443 "	
N. Harvard st..	Between Western ave. and Charles river	June 22,	47,778 "	
Morton st.	Between W. Selden st. and N. E. R.R.	July 14,	21,285 "	
Ruth st.	South-easterly side, N. W. from Marginal st.	June 29,	124 "	
South st.	Footway across location of railroad to Conway st.	Aug. 10,		
Spring st.	Centre st. to Gardner st.	June 28,	42,378 "	
Traverse st.	Between Canal st. and Haverhill st.,	Aug. 30,	.....	110 lin. ft., 4,400 sq. ft.

Public Alleys.

Accepted under Chapter 323 of the Acts of 1891, and Amendments, and Chapter 298 of the Acts of 1898.

DATE.	Number.	Dis- trict.	Location.	Length, Lin. ft.
Oct. 12,	401, 402, 403, 404,	5,	From Irvington st., between Huntington ave. and St. Botolph st., to rear of estates on northeasterly side of Massachusetts ave.,	2,028.84
Oct. 12,	405,	5,	From Huntington ave. to St. Botolph st., in rear of estates fronting on Massachusetts ave.....	236.00
Oct. 12,	414, 415, 416, 417, 418, 419, 420, 421,	5,	From Arlington st. to Massachusetts ave., between Beacon and Marlborough sts.....	4,335.00
Oct. 27,	301,	4,	From River st. to Pinckney st.	256.00
Oct. 31,	101,	2,	From Richmond st. to Cross st., between Fulton and Commercial sts.	374.73
Nov. 10,	430, 431, 432, 433, 435, 436, 437,	5,	From Massachusetts ave. to Arlington st., between Commonwealth ave. and Newbury st.....	4,335.00
Dec. 21,	2,001,	21,	From Webster st. to Marginal st., south-east of Cottage st.	240.00
				<u>11,805.57</u>

The records of the Street Commissioners for the year 1898 show the following results :

Streets laid out or extended	29,712.13	linear feet.
Streets widened and relocated	195,820	square feet.
Streets discontinued	4,400	square feet.
Increase in mileage	5.63	miles.
Public alleys	11,805.57 = 2.23	miles.

Permits for excavating have been issued from this office during the year ending January 31, 1899, as follows :

STREET OPENINGS.

	Permits.	Feet.
American Telegraph Co.....	3	88
Auxiliary Fire Alarm Co.....	1	50
Automatic Fire Alarm Co.....	2	475
Boston Fire Department	7	100
Boston Lamp Department	341	3,171
Boston Park Department	5	85
Boston Public Buildings Department.....	15	85
Boston Street Department, Sewer Division....	222	2,700
Boston Water Department	3,432	120,355
Boston Water Department, Income Division.....	256	2,750
Boston & Albany R.R. Co.....	5	100
Boston & Maine R.R. Co.....	40	650
Boston Electric Light Co.....	476	47,649
Boston Elevated Railway Co.	408	172,138
Boston Gaslight Co.	859	32,080
Boston Low Tension Wire Association	3	165
Boston & Providence R.R. Co.	1	750
Brookline Gaslight Co.	354	21,065
Charlestown Gaslight Co.	72	2,167
Church Green Light and Power Co.....	6	235
Donovan & Co.....	70	6,058
Dorchester Gaslight Co.	509	36,248
Edison Electric Illuminating Co.....	530	17,220
Eastern Cold Storage Co.	22	2,469
East Boston Gaslight Co.	150	8,863
Fitchburg R.R. Co.	17	30
French Telegraph Co.	2	40
Jamaica Plain Gaslight Co.	108	3,622
Lynn & Boston R.R. Co.....	1	10
Massachusetts Pipe Line Co.....	13	42,150
Metropolitan Construction Co.....	5	260
Metropolitan Water Commission	7	39,800
N. E. Telephone and Telegraph Co.	293	35,170
N. E. Telegraph Co.	7	120
Newtownville & Watertown Ry. Co.....	2	11,300
N.Y., N.H. & H. R.R. Co.....	34	1,496
Norfolk Suburban Street Railway Co.	1	400
Postal Telegraph and Cable Co.....	6	505
Quincy & Boston Street Railway Co.....	1	260
Quincy Market Cold Storage Co.	38	2,065
Roxbury Gaslight Co.	380	11,101
South Boston Gaslight Co.	180	8,048
Simpson Bros., Corporation.....	140	5,525
Standard Oil Co.	8	124
Union Freight Railway Co.	2	1,200
W. Roxbury & Roslindale Street Railway Co.....	3	2,768
Western Union Telegraph Co.	20	4,751
Miscellaneous	3,194	146,130
Emergency permits.....	1,553	9,318
Totals	<u>13,804</u>	<u>803,909</u>

Total number of feet opened was 803,909 feet.

Making the total length of openings about 152.25 miles.

Permits other than for opening streets have been granted as follows :

Advertising by men wearing hat and coat lettered	33
Clearing snow from roof	371
Distributing sand	6
Driving cattle	4
Erecting, repairing and removing awnings	4,647
Erecting and repairing buildings	4,421
Feeding horses on the street	169
Moving buildings	45
Loading and unloading goods on sidewalk	190
Pedlers, two different classes	689
Placing signs flat on buildings	1,461
Projecting lamps and signs	154
Raising and lowering safes, etc.	382
Selling from areas	167
Selling from buildings	359
Special for various purposes	144
Special for June 17 and July 4	60
Extensions of permits	403
	13,705
Total number of permits for street openings	12,251
Total number of permits for all other purposes	13,705
Total	25,956

Three thousand letters, postal cards and notices have been sent to storekeepers and householders, in connection with selling from doorways, windows etc.

There have been 10,484 notices sent the various foremen during the year, directing them to repair defects in the public streets, which have been reported by the police and others; also 1,055 notices to private parties to repair work improperly done when permits had been granted to open streets, and to owners of estates where coal-holes and sidewalk lights were defective.

There have been 216 notices sent to departments and corporations regarding proposed street improvements.

Three hundred and forty-three new bonds have been filed during the year.

Ten thousand two hundred and sixty-three dollars and fifty cent for permits has been received and deposited with the City Collector.

There is \$7,473 due for permits at this date from corporations and departments.

Street numbers have been assigned to the estates in the different districts as follows :

East Boston District . . .	1 whole, and	27 parts of streets.
Charlestown District . . .	1 whole, and	10 parts of streets.
City proper		59 parts of streets.
South Boston District . . .		29 parts of streets.
Dorchester District	9 whole, and	346 parts of streets.
Roxbury District	12 whole, and	167 parts of streets.
West Roxbury District . . .	14 whole, and	171 parts of streets.
Brighton District	16 whole, and	94 parts of streets.
Total	53 whole, and	903 parts of streets.

Five thousand five hundred and ninety-seven figures were required for this work.

Numbers were changed on 210 estates, 31 streets are now listed and ready to be numbered, and 3 to be renumbered.

All street openings made during the year have been examined as to repaving, etc., and where defects were found the parties making the opening were notified to put the paving in a condition satisfactory to the Superintendent of Streets. In all, four thousand one hundred notices were sent by the Superintendent of Inspectors in regard to these defects.

Inspectors were detailed to serve on work done by the various corporations, to be present at all times while work was in progress, and to make a weekly report, in writing, covering the work done and its condition.

APPENDIX D.

REPORT OF THE DEPUTY SUPERINTENDENT OF
THE SANITARY DIVISION.

ROOMS 917-920 TREMONT BUILDING,
BOSTON, February 1, 1899.

BENJ. W. WELLS, ESQ.,

Superintendent of Streets:

DEAR SIR, — I hereby respectfully submit the annual report of the expenditures, income and operation of the Sanitary Division of the Street Department for the financial year ending January 31, 1899.

Respectfully submitted,

PATRICK O'SHEA,

Deputy Superintendent.

The work of the Sanitary Division includes the removal of house offal and the removal of house dirt and ashes accumulated from the burning of materials for heating buildings and for domestic purposes.

This work has been done on practically the same basis as in former years, although there have been some changes made in the interests of economy and better service. The method of collecting ashes by what was known as the route system has been abolished in the section of the city north of Massachusetts avenue, and the more satisfactory and less expensive method of collection by districts or divisions substituted. The offal will be handled in the same manner during the summer months, and more frequent collections will be made.

The cost of disposing of the 1,500 loads of refuse collected daily is constantly increasing, as owing to the undesirable character of much of it for use as filling it is difficult to obtain suitable dumping places. The low lands contiguous to the thickly settled parts of the city have for the most part been filled, and the only available dumps are so far distant from the points of collection that the expense of hauling is abnormally increased. In fact, the economic disposal of this kind of refuse, namely, ashes, is becoming a serious problem, and unless it can be made of commercial value in the near future it will be necessary to secure additional dumping places on the water front, so that it may be towed to sea. Much progress has been made toward this end in the separation by householders and storekeepers of the combustible portion of the waste, which has



WASTE BARRELS AND SCAVENGERS.



COLLECTING COMBUSTIBLE WASTE — SHOWING CITY TEAM.

been placed by them in a third receptacle, and otherwise tied in bundles for convenience in handling. It is collected by the paper carts, and delivered at the plant of the City Refuse Utilization Company on Atlantic avenue. Here the various grades of paper, rags, twine, etc., are culled out, put up in bales and sold as merchandise, the balance being burned in a Morse-Boulger furnace specially designed for the purpose. This plant has been in successful operation since January, 1899, and was designed to utilize all combustible refuse collected in the city proper north of Massachusetts avenue, which has been estimated at about 300 cubic yards daily. It is obvious that the disposal of clean ashes, separated from lighter, but more bulky, refuse — such as paper, etc. — is a comparatively easy matter to handle. In the short time that it has been tested, most satisfactory results have been obtained, and I would recommend its extension to other sections of the city, where smaller and less expensive plants might be centrally located for treating refuse of this kind.

The separation has been brought about largely through the distribution of circulars calling the attention of housekeepers to the matter, and when they understand more fully its object their co-operation will be of invaluable assistance to this division.

During the past year a new method has been adopted for the disposal of the two hundred and fifty tons of offal collected in the city daily. In past years it has been the custom to sell to farmers each day as large a portion as possible of the collections, the balance remaining unsold being towed to sea; but, as stated in the report for 1897, a contract was made for a period of ten years with the New England Sanitary Product Company for the utilization of this material, and on November 15, 1898, their plant was put into operation, and they are now treating from 180 to 200 tons of refuse daily, which we deliver to their boats. The balance, about fifty tons, is collected in the outlying sections of the city, and is disposed of there by the contractors.

I would respectfully call your attention to Barney Dumping Boat No. 1, which has been in service in this city for more than twenty years. The boat is unseaworthy, and will not admit of further repairs. Attention is also called to the stables in charge of this division, which are very much out of repair. Special appropriation for their reconstruction is recommended, as also for the purchase of a new boat.

The following table shows the amounts expended for the maintenance of the Sanitary Division for the past five (5) years:

1894	.	.	.	.	.	.	.	.	.	.	\$467,459 02
1895	.	.	.	.	.	.	.	.	.	.	432,778 52
1896	.	.	.	.	.	.	.	.	.	.	476,807 34
1897	.	.	.	.	.	.	.	.	.	.	492,670 56
1898	.	.	.	.	.	.	.	.	.	.	508,152 88

Comparative Table, showing Net Cost of Maintenance of the Sanitary Division to the City of Boston.

	Expended.	Income.	Net Cost to City.
1894	\$467,459 02	\$42,320 55	\$425,638 47
1895	432,778 52	42,985 53	389,792 99
1896	477,241 54	36,146 77	441,094 77
1897	492,670 56	34,430 48	458,240 08
1898	508,152 88	28,269 90	479,882 98

During the year a contract was made with the New England Sanitary Product Company, for the utilization of the offal collected in the city daily; and commencing November 15, 1898, the offal collected in the South Boston, Charlestown, City Proper, Roxbury, and part of West Roxbury districts, in all about 80 per cent. of the total daily collections, was sent to Fort Hill Wharf and deposited on boats owned by this company. In order to carry out the provisions of this contract it was necessary to construct a new wharf at the foot of Oliver street, at an expense of about \$6,000, and also to purchase twelve new steel dumping carts.

Out of 57,764 loads collected during the past year in the city and suburbs, 34,141 loads, or 59 per cent., was fed to hogs, and 23,652 loads, or 41 per cent., carried in dumping boats to the sea.

Collection and Disposal of Offal.

Year.	Total amount collected.	Amount sold.	Amount dumped on scow and towed to sea or wasted.	Per cent. wasted to total collection.	Amount of receipts from sales.
1894 ¹	42,082 loads	37,057 loads	5,025 loads	12 per cent.	\$26,262 40
1895 ²	41,480 "	36,620 "	4,860 "	12 "	27,374 47
1896 ³	45,844 "	35,549 "	10,295 "	22 "	21,187 76
1897 ⁴	46,071 "	32,495 "	13,576 "	29 "	17,416 75
1898 ⁵	45,703 "	20,463 "	23,652 "	51 "	10,982 25

¹ In East Boston, 3,720 loads; Brighton, 1,539 loads; Dorchester, 3,296 loads, — total, 8,555 loads. Collected during 1894 are not included in above table. For 1891 and 1892, East Boston and Brighton were estimated at 5,100 loads.

² In East Boston, 3,732 loads; Brighton, 1,419 loads; Dorchester, 4,179 loads; West Roxbury, 517 loads, — total, 9,847 loads. Collected during 1895 not included in above table.

³ In East Boston, 3,786 loads; Brighton, 1,362 loads; Dorchester, 4,707 loads; West Roxbury, 703 loads, — total 10,558 loads. Collected during 1896 not included in above table.

⁴ In East Boston, 3,720 loads; Brighton, 1,520 loads; Dorchester, 4,712 loads; West Roxbury, 760 loads, — total, 10,712 loads. Collected during 1897 not included in above table.

⁵ In East Boston, 3,726 loads; Brighton, 1,472 loads; Dorchester, 6,058 loads; West Roxbury, 895 loads, — total, 12,061 loads. Collected during 1898 not included in above table.

The following table shows the full force engaged in the collection of offal alone throughout the entire city:

The Force Employed.

CITY FORCE.	No.	Hired Teams.	CONTRACTORS' TEAMS.				Total.
			East Boston.	Brighton.	Dorchester.	West Roxbury.	
Sub-foremen	3	.....	.....	.....	.....	.....	3
Inspectors.....	8	.....	1	1	1	1	12
Offal clerk.....	1	.....	.....	.....	.....	.....	1
Teamsters.....	68	3	6	6	12	3	98
Helpers.....	73	3	6	6	23	3	114
Dumpers.....	5	.....	.....	.....	.....	.....	5
Tallyman.....	1	.....	.....	.....	.....	.....	1
Totals.....	159	6	13	13	36	7	234

The money received from the sales of house offal is deposited monthly with the City Collector, and then credited to the sinking fund of the City of Boston.

HOUSE DIRT AND ASHES.

In the collection of house dirt and ashes there are employed 380 men and 163 carts. This material is removed from hotels, tenement houses and stores daily; from dwelling houses once a week.

The City Ordinances of 1898 (chap. 38, sect. 1) require that house dirt and ashes shall be kept in an easily accessible place for their removal, the men being obliged to enter the yards and remove the receptacles to the sidewalks, where their contents are dumped into the carts. The receptacles are then placed in their original position. The material is disposed of, if possible, on low lands, being used for filling, and is also dumped on scows, to be carried to sea. Of the amount collected last year, 28 per cent. was carried to sea.

The collection of house dirt and ashes in four sections of the city is done by contract, as follows: South Dorchester, by Denis Flynn, and North Dorchester by Patrick J. Lyons; East Boston, by W. F. Hedrington, and a part of West Roxbury by John J. Moore.

Of the 394,937 loads of ashes collected during the past year, 234,223 loads, or 60 per cent., were deposited on low lands in the outlying districts of the city; 113,528 loads, or 28 per cent., were towed to sea, and the balance, 47,186 loads, or 12 per cent., were collected by contractors and used on low lands for filling.

Good results were made in the collection of store-sweepings in what is known as the business section of the city, the occupants of stores, etc., being requested, by the distribution of printed notices,



COMBUSTIBLE WASTE PLANT — SORTING.

to put out all waste material previous to 7.30 A.M., so that the collectors could remove it while the streets were passable, much annoyance and inconvenience which had previously existed being in a large measure prevented.

Several complaints have been received concerning the failure of the division to promptly remove offal and ashes; investigation of these has usually shown that either offal has not been properly separated from ashes or other refuse, as is insisted upon by the department, or else that the receptacles were kept in some inaccessible place, or were larger than the ordinances provide and the regulations of the department permit.

In order that householders might understand these regulations and that the work be not unnecessarily delayed, the following circular was issued:

Notice is hereby given that the new plant erected for the incineration of combustible waste will be in operation at an early date, and the following regulations in regard to the three separations of refuse will be enforced by this department:

1. Ashes must be kept free from all other refuse matter and in metallic vessels.
2. House offal or garbage must be kept free from all other refuse matter (except food cans and food bottles) and in suitable vessels.
3. All other refuse, such as paper, rags, excelsior, straw, mattresses, old clothes, pasteboard boxes, carpets, etc., must be kept free from ashes and garbage and in suitable vessels, or in bundles firmly fastened so as to prevent the rubbish from being scattered in handling, and must be protected from the weather until collected by the proper authorities.

The above rules must be complied with, or refuse will not be removed.

The removal of ashes and other refuse is governed by the following provisions of law:

ACTS OF 1892, CHAPTER 419, SECTION 112.

All receptacles for ashes, waste and other substances, liable, by spontaneous combustion or otherwise, to cause a fire, shall be made of incombustible material, satisfactory to the inspector. Every building used as a tenement or lodging house shall have outside, and appurtenant to it, a suitable space, satisfactory to the inspector, for the temporary deposit of garbage and other refuse matter.

REVISED ORDINANCES OF 1892, CHAPTER 43, SECTION 14.

No person shall keep in his house, or on his land, any house offal, unless the same is placed in a suitable vessel, free from ashes and other refuse matter, and so placed as to be easily removed.

REVISED ORDINANCES OF 1892, CHAPTER 43, SECTION 17.

No person shall place or keep in or near any building, ashes or cinders in such a manner as to be liable to cause fire, nor mix them with other substances, nor place or keep them except in metallic vessels, so placed as to be easily removed.

BENJAMIN W. WELLS,
Superintendent of Streets.

PATRICK O'SHEA,
Deputy Supt. Sanitary Division.

November, 1898.

It will be noted that the circular also requires a third separation, viz., that all refuse other than household ashes or offal be placed in a third receptacle. This was done in anticipation of an arrangement for caring for the combustible waste separate from the heavy ash by incineration.

The annual spring cleaning of the entire city was undertaken with good results, and the following notice issued to the public:

CITY OF BOSTON.

Notice to Housekeepers and Tenants.

Housekeepers and other occupants of dwellings are requested to place their house and cellar dirt and sweepings in the streets opposite their premises between the hours of sunrise and 2 o'clock P.M. of the following days: Monday, May 2; Tuesday, May 3; Wednesday, May 4; Thursday, May 5; Friday, May 6; when they will be removed by the city carts. After which times no person will be allowed to place any dirt, ashes, filth or rubbish of any kind whatever in any of the ways, streets or places of the city, without a permit from the Superintendent of Streets.

Dirt of any kind not to be placed in the streets on Saturday.

BENJAMIN W. WELLS,
Superintendent of Streets.

CITY HALL, BOSTON, 1898.

NOTE.—This circular, printed in English, Hebrew and Italian, was posted in prominent places by the regular bill-posting companies, and for a week was also carried on the sides of all the wagons and carts owned by this division.

Special Notice.

On and after above-named days, ashes, etc., in order to be removed by city carts, must be placed in receptacles not larger than an ordinary flour barrel, and in a position on a level with the grade of the adjoining sidewalk.

Vault filth, offal, bricks and mortar, gravel and earth, garden rakings and shrubbery are not included in the above, and will not be removed by the city if placed in the streets.

REMOVAL OF ASHES AND HOUSE DIRT.

The removal of ashes, house and store dirt has been attended to during the year by a minimum force of three hundred and eighty men and one hundred and forty-two city carts, also by six carts with the East Boston contractor, twelve carts with Dorchester contractors, and three carts with the West Roxbury contractor.

This work shows a constant increase from year to year, as will be seen in the following table, and is an indication of the actual growth of the city:

AMOUNT OF ASHES, HOUSE AND STORE DIRT REMOVED.

Year.	No. of Loads.
1894	326,798 of 44 cubic feet
1895	336,886 " " " "
1896	363,975 " " " "
1897	¹ 389,098 " " " "
1898	¹ 394,937 " " " "

¹ Previous to the year 1897, each load of ashes contained about 44 cubic feet. During the year 1897 all the ash carts owned by the city were equipped with side-boards, increasing their capacity to 54 cubic feet, but for the purpose of comparison the old basis has been used.

Comparative Statement of Number of Loads of Ashes Collected during Sixteen Weeks of the Summer and Sixteen Weeks of the Winter.

Summer.	Loads.	Winter.	Loads.	Difference for Winter.	Loads.
April 27, 1894, to August 16, 1894.....	88,865	October 25, 1894, to February 7, 1895.....	116,915	1894	28,050
“ 26, 1895, “ “ 15, 1895.....	94,671	“ 18, 1895, “ “ 6, 1896.....	121,873	1895	27,202
“ 30, 1896, “ “ 13, 1896.....	101,135	“ 16, 1896, “ January 28, 1897.....	117,214	1896	16,079
“ 29, 1897, “ “ 19, 1897.....	109,366	“ 15, 1897, “ “ 27, 1898.....	126,057	1897	16,691
“ 29, 1898, “ “ 18, 1898.....	110,931	“ 7, 1898, “ “ 26, 1899.....	129,208	1898	18,277

The following table shows the force engaged in this collection throughout the entire city:

The Force Employed.

CITY TEAMS.	No.	Hired Teams.	CONTRACTORS' TEAMS.				Total.
			North Dorchester.	South Dorchester.	East Boston.	West Roxbury.	
Sub-foremen	6	.....	.....	.....	.....	.....	6
Inspectors	5	.....	1	.....	1	1	8
Tallymen	3	.....	.....	.....	.....	.....	3
Teamsters	104	38	7	5	6	3	163
Helpers	120	38	7	5	6	3	179
Dumpers	21	.....	.....	.....	.....	.....	21
Totals	259	76	15	10	13	7	380

Material Collected by Districts.

MATERIAL.	South Boston.	East Boston.	Charlestown.	Brighton.	West Roxbury.	Dorchester.	Roxbury.	South End and Back Bay.	North and West Ends.	Total Loads.
House dirt and ashes.	28,678	12,639	23,027	10,483	23,650	27,485	60,165	114,763	94,047	394,937
House offal.	3,938	3,726	2,621	1,472	3,002	6,058	8,582	24,576	3,789	57,764
Totals	32,616	16,635	25,648	11,955	26,652	33,543	68,747	139,339	97,836	452,701

Number of Loads of Material Collected from January 31, 1893, to February 1, 1899.

YEARS.	Ashes.	Offal.	Total Loads.
1894	326,798	50,637	377,435
1895	336,886	51,327	388,213
1896	363,975	56,402	420,377
1897	389,098	56,783	445,881
1898	¹ 394,937	² 57,764	452,701

¹ William F. Hedrington, East Boston, collected.....12,639 Loads.
 Patrick J. Lyons, North Dorchester, collected.....16,266 "
 Denis Flynn, South Dorchester, collected.....11,219 "
 John J. Moore, part of West Roxbury, collected.....7,062 "
 47,186 "

² Thomas Mulligan, East Boston, collected.....3,726 Loads.
 George T. Barnes, Brighton, collected.....1,472 "
 John Bradley, Dorchester, collected.....6,058 "
 George T. Barnes, part of West Roxbury, collected.....805 "
 12,061 "



COMBUSTIBLE WASTE PLANT — FURNACE ROOM.

Disposition of Material Collected.

WHERE DUMPED.	Loads of House Dirt and Ashes.	Loads of House Offal.	Loads of Street Sweepings, Street Clean- ing Division.	Loads of Cess- pool Matter, Sewer Divi- sion.	Total Loads.
Swett st., J. C. Cobb.....	36,795	.....	.....	.....	36,795
Ward st., Sewall-Day Co.....	23,229	.....	.....	.....	23,229
First st., E. Camb., J. T. Scully	19,497	.....	.....	.....	19,497
Norfolk ave., J. J. Nawn.....	16,609	.....	.....	.....	16,609
Alford st., City Park Dept....	16,063	.....	.....	.....	16,063
Gainsboro' st., Mr. Clark	11,389	.....	.....	.....	11,389
Lansdowne st., Mr. Carter....	10,809	.....	.....	.....	10,809
D st., Commonwealth of Mass.,	9,580	.....	.....	.....	9,580
Williams st., Mrs. Carey.....	8,558	.....	.....	.....	8,558
Vale st., Choate-Burnham Est.,	7,557	.....	.....	.....	7,557
Harold st., John Stone.....	7,294	.....	.....	.....	7,294
Centre st., Owen Nawn.....	6,909	.....	.....	.....	6,909
Rutherford ave., B. & M. R.R.,	6,795	.....	.....	.....	6,795
Parker st., Mr. Bowers.....	6,675	.....	.....	.....	6,675
Maverick st., E. Bost. Land Co.,	5,425	.....	.....	.....	5,425
E. Ninth st., H. J. Bowen, agt.,	4,669	.....	.....	.....	4,669
Norfolk ave., Hub Brewing Co.,	3,975	.....	.....	.....	3,975
Congress st., Com. of Mass....	3,163	.....	.....	.....	3,163
K st., Fiske, Holmes & Co....	2,483	.....	.....	.....	2,483
Bennington st., E. Boston Co.,	2,389	.....	.....	.....	2,389
Gardner st., Gordon Dexter...	2,365	.....	.....	.....	2,365
Chelsea st., Patrick Haley....	2,283	.....	.....	.....	2,283
Border st., Geo. McQuesten...	2,256	.....	.....	.....	2,256
Various places, City teams....	29,809	1,588	.....	.....	31,397
Various places, contracts.....	34,833	.....	.....	.....	34,833
At sea by scows.....	113,528	23,652	27,230	4,859	169,269
Sold to farmers.....	.....	20,463	.....	.....	20,463
E. Boston, by Thos. Mulligan,	.....	3,726	.....	.....	3,726
Brighton, by G. T. Barnes....	.....	1,472	.....	.....	1,472
Dorchester, by John Bradley...	.....	6,058	.....	.....	6,058
W. Roxbury, by G. T. Barnes...	.....	805	.....	.....	805
Totals.....	394,937	57,764	27,230	4,859	484,790

Final disposition of all material collected from February 1, 1898, to February 1, 1899, together with the portion of street sweepings and cesspool dirt, disposed of for other divisions by the Sanitary Division, is shown in the following table:

	Amount collected.	Deposited on low lands.	Towed to sea.	Collected by con- tractors.	Sold to farmers.
	Loads.	Loads.	Loads.	Loads.	Loads.
Ashes, house and store dirt	394,937	234,223	113,528	47,186	.....
House offal.....	57,764	1,588	23,652	12,061	20,463
Street sweepings.....	27,367	.....	27,367	.....	.....
Cesspool dirt.....	4,934	.....	4,934	.....	.....
Totals.....	485,002	235,811	169,481	59,247	20,463

¹ This amount is included in the amount collected, 57,764. Of the 12,061 loads, 3,726 were collected in East Boston, 6,058 in Dorchester, 1,472 in Brighton, and 805 in West Roxbury.

Cost of Hired Teams, Including Contracts.
MATERIAL COLLECTED.

DISTRICT.	AMOUNT EXPENDED.			NUMBER OF LOADS.		
	Ashes.	Offal.	Total.	Ashes.	Offal.	Total.
1.—South Boston	\$6,845 00	\$55 00	\$6,900 00	14,066	22	14,088
2.—East Boston	7,450 00	8,000 00	15,450 00	¹ 12,639	⁴ 3,726	16,365
3.—Charlestown	1,125 00	542 50	1,667 50	1,729	210	1,939
4.—Brighton	4,269 00	2,715 50	6,984 50	6,802	⁵ 1,472	8,274
5.— { West Roxbury, by Dis- trict 7	3,130 00	820 00	3,950 00	5,349	306	5,655
	2,250 00	1,722 00	3,972 00	² 7,062	⁶ 805	7,867
6.—Dorchester	7,943 17	4,980 00	12,923 17	⁸ 27,485	⁷ 6,058	33,543
7.—Roxbury	11,910 50	1,892 50	13,803 00	21,389	706	22,095
8 and 9.— { South End and Back Bay	18,575 50	1,152 50	19,710 00	28,567	351	28,918
10.—North and West Ends...	12,115 00	120 00	12,235 00	20,153	68	20,221
Totals	\$75,595 17	\$22,000 00	\$117,595 17	145,241	13,724	158,965

CONTRACTS.

<i>Offal.</i>	<i>Ashes.</i>
¹ William Hedrington	⁴ Thomas Mulligan
² John J. Moore	⁵ George T. Barnes
³ Patrick J. Lyons	⁶ "
Denis Flynn	⁷ John Bradley
\$7,300 00	\$8,000 00
2,100 00	3,000 00
3,645 00	1,800 00
3,850 00	4,980 00

DIVISION OF AMOUNT EXPENDED.

	Hired Teams.	Contractors.	Total.
Ashes	\$57,952 00	\$17,643 17	\$75,595 17
Offal	4,582 50	17,417 50	22,000 00
Total	\$62,534 50	\$35,060 67	\$97,595 17

The total expenditures of the division, including work done for other divisions and paid for by them, was . . . \$541,102 94
 Less amount so repaid 32,950 06

Cash paid and bills rendered to City Collector \$508,152 88
 27,663 49

Net cost of maintenance of Sanitary Division, February 1, 1893, to January 31, 1899 \$480,489 39

Details of expenditures, income and operation will be found on pages 141 to 143.

FINANCIAL STATEMENT.

Amount of appropriation	\$500,000 00
Transferred from Surplus Revenue	\$7,152 88
Transferred from rent of Hecht's Wharf	1,000 00
	<u>8,152 88</u>
Total amount appropriation	\$508,152 88
Total amount expended	<u>\$508,152 88</u>

INCOME.

Amounts of moneys deposited and bills presented to the City Collector for collection for material sold and work performed by the Sanitary Division of the Street Department during the year ending January 31, 1899.

On February 1, 1898, checks for \$2,649.80 were deposited with the City Collector, as the messenger of the Sanitary Division, who was custodian of same, was unable to reach the office on account of the severe storm, hence the Collector credited the division with the amount, \$2,649.80 not included in above table, as a part of the income for the year 1898-99.

Moneys Deposited with City Collector.

From sale of house offal	\$10,982 25
From letting of scow privileges	1,223 60
	<u>\$12,205 85</u>

Bills Deposited with City Collector.

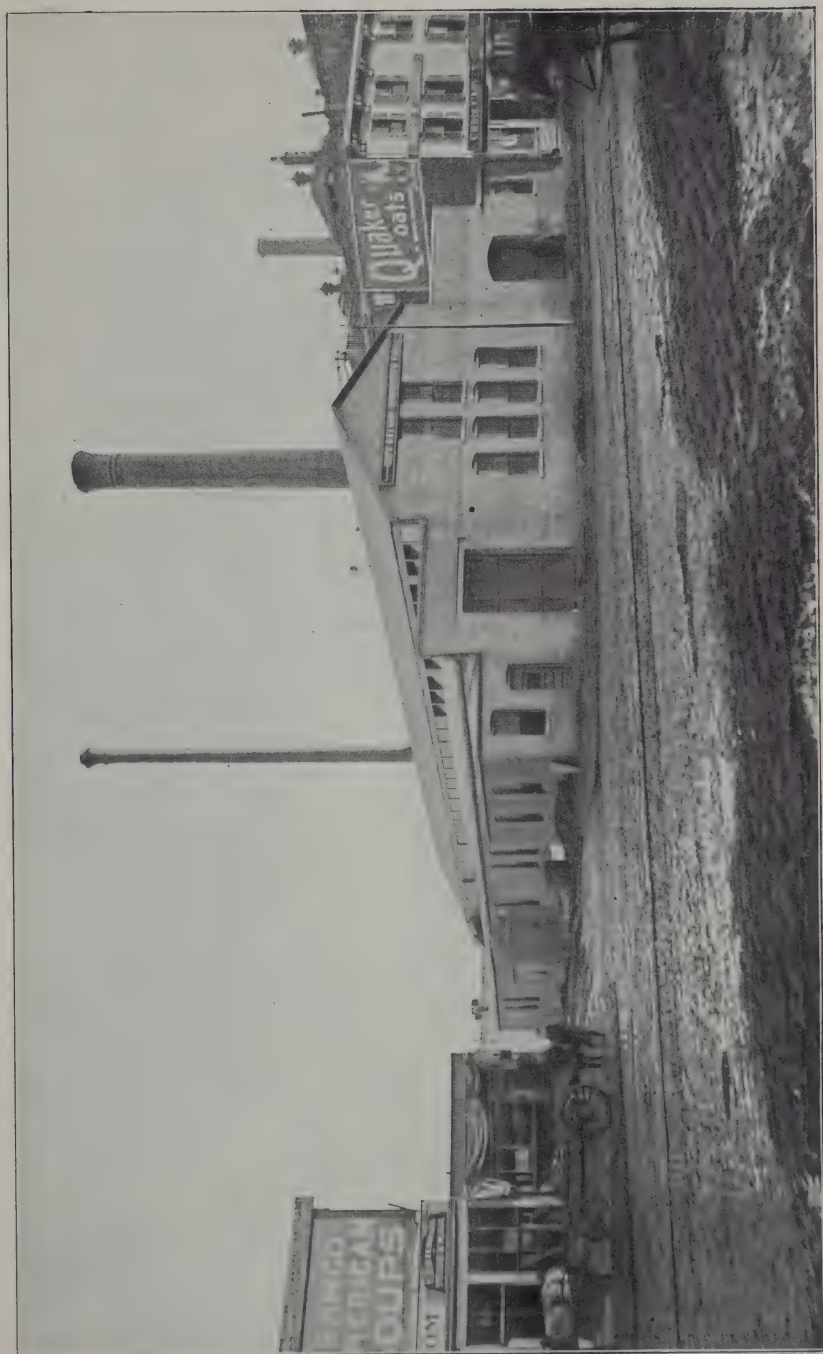
For the removal of engine ashes	\$13,952 55
For the sale of manure	483 44
For the letting of scow privileges	21 65
For the letting of Fort Hill Wharf	1,000 00
	<u>15,457 64</u>
	<u>\$27,663 49</u>
Amount collected by the Collector	<u>\$28,269 90</u>

Objects of Expenditures.

ITEMS.	Total amount expended.	Amount paid by other Divisions.	Amount charged to the Sanitary Division.
Salary of Deputy Superintendent	\$3,000 00	.....	\$3,000 00
Salaries of clerks and messengers in office	7,695 82	.....	7,695 82
Salaries of foremen	8,449 97	\$291 51	8,158 46
For labor in removing house dirt and ashes	133,287 32	13,462 78	124,824 54
For labor, sub-foremen and inspectors, collecting house dirt and ashes	12,896 25	918 50	11,977 75
For extra teams collecting house dirt and ashes	57,952 00	.....	57,952 00
<i>Carried forward</i>	\$228,281 36	\$14,672 79	\$213,608 57

Objects of Expenditures. — *Continued.*

ITEMS.	Total amount expended.	Amount paid by other Divisions.	Amount charged to the Sanitary Division.
<i>Brought forward</i>	\$228,281 36	\$14,672 79	\$213,608 57
For collecting house dirt and ashes in East Boston . . .	7,450 00	.....	7,450 00
For collecting house dirt and ashes in West Roxbury, south of Pond, May, Arborway and Morton streets . .	2,250 00	.....	2,250 00
For collecting house dirt and ashes in Dorchester, south of Park, School and Harvard streets	4,000 00	.....	4,000 00
For collecting house dirt and ashes in Dorchester, north of Park, School and Harvard streets	3,943 17	.....	3,943 17
For ash stock, consisting of shovels, cart covers, etc. . .	1,624 19	.....	1,624 19
For labor in removing house offal	85,579 77	10,354 41	75,225 36
For labor, sub-foremen and inspectors, removing house offal	9,570 76	713 74	8,857 02
For extra teams, removing house offal	4,582 50	.....	4,582 50
For removing house offal in East Boston	8,000 00	.....	8,000 00
For removing house offal in Brighton	2,715 50	.....	2,715 50
For removing house offal in West Roxbury, south of Pond, May, Arborway and Morton streets	1,722 00	.....	1,722 00
For removing house offal in Dorchester	4,980 00	.....	4,980 00
For offal stock, consisting of wagons, buckets, etc. . . .	2,909 75	.....	2,909 75
For disposition of offal	1,775 00	.....	1,775 00
For labor of men employed in stables and yards	23,168 74	1,050 66	22,118 08
For allowed time holidays . .	23,564 67	413 42	23,151 25
For grain	14,935 96	223 73	14,712 23
For hay and straw	10,780 36	1,115 66	9,664 70
For horses	3,642 50	40 00	3,602 50
For veterinary services and medicines	2,255 08	.....	2,255 08
For stable stock, consisting of sponges, currycombs, brushes, etc.	1,208 25	.....	1,208 25
For board, use and clipping horses	733 12	.....	733 12
For miscellaneous stable supplies	35 38	.....	35 38
<i>Carried forward</i>	\$449,708 06	\$28,584 41	\$421,123 65



COMBUSTIBLE WASTE PLANT ON ATLANTIC AVENUE.

Objects of Expenditures. — *Concluded.*

ITEMS.	Total amount expended.	Amount paid by other Divisions.	Amount charged to the Sanitary Division.
<i>Brought forward</i>	\$449,708 06	\$28,584 41	\$421,123 65
For horseshoeing (outside shops).....	2,750 41	1,788 50	961 91
For labor, stock and tools, horseshoeing shops.....	6,585 44	295 05	6,290 39
For labor, stock and tools, wheelwright shop.....	10,095 60	568 92	9,526 68
For labor, stock and tools, blacksmith shop.....	8,401 50	569 51	7,831 99
For labor, stock and tools, harness shop.....	5,330 59	328 55	5,002 04
For labor, stock and tools, paint shop.....	9,095 71	809 38	8,286 33
For labor, rental, towage, etc., on account of dumping boats.	27,934 24	.....	27,934 24
For repairs on stables and sheds (outside shops).....	1,486 09	.....	1,486 09
For fuel.....	765 30	.....	765 30
For gas.....	507 67	.....	507 67
For electric lights.....	502 60	.....	502 60
For water.....	651 40	.....	651 40
For printing.....	1,567 34	.....	1,567 34
For stationery.....	884 25	.....	884 25
For advertising.....	544 13	.....	544 13
For rents.....	12,311 18	.....	12,311 18
For telephones.....	469 92	5 74	464 18
For tolls and fares.....	967 65	.....	967 65
For damages by city teams...	44 49	.....	44 49
For badges of employees.....	108 00	.....	108 00
For office items and expenses,	391 37	.....	391 37
Total	\$541,102 94	\$32,950 06	\$508,152 88

Recapitulation of Expenditures.

Weekly pay-rolls, foremen and laborers	\$331,461 77
“ “ clerks	5,895 82
	\$337,357 59
Monthly pay-roll, deputy and clerk	\$4,800 00
“ “ dumping boat	1,800 00
	6,600 00
Monthly teaming-roll	62,494 00
“ bills and special drafts for stock, etc., including monthly pay-rolls of Sewer Division for towboat, etc.	134,651 35
	\$541,102 94

INCOME.

From board and care of horses, and for repairing vehicles of:

Street Cleaning Division	\$11,270 21
Paving Division	10,163 13
Sewer Division	7,284 29
<i>Carried forward</i>	\$28,717 63

<i>Brought forward</i>		\$28,717 63
Street Watering Division		900 14
Bridge Division		228 86
Central Office		850 08
County of Suffolk		1,322 07
Public Buildings Department, Repairs Division,		706 78
Public Grounds Department, Highland Park ap- propriation		120 00
City Engineer's Department, Dorchester avenue grade crossing		104 50
		<u>\$32,950 06</u>
Deducted from weekly pay-rolls	\$31,627 99	
Deducted from monthly bills	1,322 07	
		<u>\$32,950 06</u>
Net cost of maintenance, Sanitary Division, for year 1898- 1899		<u>\$508,152 88</u>

The division expenditures show an excess over the amount appropriated of \$8,152.88.

When the estimates were made and this appropriation granted, I did not anticipate that the division would be obliged to pay for the following extraordinary expenses:

Rent of wharf on Atlantic avenue, leased from Jacob Hecht, April 1, 1898		\$7,499 97
Payments made under contract of New England Sanitary Product Company.		1,775 00
Payments made under contracts for constructing:		
Wharf on Atlantic avenue	\$2,843 33	
Widening dock	3,376 00	
		6,219 33
New paper carts, Thomas Hill	\$1,106 00	
New iron offal wagons:		
P. F. McDonald	2,000 00	
P. Lally & Sons	520 00	
		3,626 00
		<u>\$19,120 00</u>

Total Cost for Removal of House Dirt, Ashes and House Offal.

HOUSE DIRT AND ASHES ACCOUNT.

Expended for labor, as per pay-rolls	\$209,135 57
Expended for stock, etc., as per ledger account,	106,556 39
Expended on contracts, Dorchester	7,943 17
Expended on contract, East Boston	7,450 00
Expended on contract, part of West Roxbury	2,250 00
	<u>\$333,335 13</u>

HOUSE OFFAL ACCOUNT.

Expended for labor, as per pay-rolls	\$99,733 03
Expended for stock, etc., as per ledger account,	69,671 49
Expended on contract, East Boston	8,000 00
Expended on contract, Brighton	2,715 50
Expended on contract, Dorchester	4,980 00
Expended on contract, West Roxbury	1,722 00
	<u>186,822 02</u>
Salaries deputy, clerks and foremen	20,945 79
Total	<u>\$541,102 94</u>

Comparative Table showing the Cost of Collecting Ashes and Offal and Delivering same at Various Dumps.

Cost per cart-load, including administration expenses . . .	\$1 10
“ “ “ minus “ “ “ . . .	1 07
“ “ “ of ashes, hired teams and contracts . . .	52
“ “ “ “ labor, hired teams, contracts, etc., . . .	57
“ “ “ “ offal, “ “ “ “ “ “ . . .	2 02
“ “ “ “ hired teams and contracts . . .	1 60
“ “ dumping-boat load to transport garbage to sea . . .	71 02
“ “ cart-load “ “ “ “ “ “ . . .	15

Amount Expended for the Collection of House Dirt, Ashes and House Offal, Labor, Hired Teams and Contracts.

DISTRICTS.	Expended for Collecting.	
	Ashes.	Offal.
1 — South Boston	\$16,893 38	\$8,509 50
2 — East Boston	7,897 75	8,447 75
3 — Charlestown	14,941 52	6,805 76
4 — Brighton	7,015 50	3,124 25
5 — West Roxbury	14,301 00	7,626 63
6 — Dorchester	8,376 67	5,413 50
7 — Roxbury	34,086 39	18,995 08
8-9 — South End and Back Bay	71,896 01	51,745 77
10 — West and North Ends	51,371 52	6,462 29
Totals	\$226,779 74	\$117,330 53

Maintenance of Dumping Boats, Amount Expended.

For towing by department towboat	\$6,858 97	
“ “ “ hired towboat	3,227 00	
		\$10,085 97
For repairs on Fort Hill Wharf	\$92 45	
“ “ “ dumping boat	1,620 00	
“ “ “ both by division employees	791 10	
		2,503 55
For dredging	\$450 00	
“ rents	3,999 96	
“ disinfectants	270 52	
“ manila rope, etc.	30 22	
“ telephone, salt, etc.	70 50	
“ kerosene oil and supplies	85 33	
“ coal	55 96	
“ advertising	23 50	
“ screens, etc.	30 40	
		5,016 39
For labor:		
foreman	\$1,800 00	
crew, dumpers, etc.	6,777 59	
holidays	310 50	
		8,888 09
		\$26,494 00
Number of trips to sea by department towboats, ...	327	
Number of trips to sea by hired towboats	46	
		373
Number of loads of garbage carried to sea	169,269	
Cost per cart-load of garbage carried to sea	\$0 15	
Cost per boat-load of garbage carried to sea	71 02	

(The above statement does not include the cost of alterations made on Fort Hill Wharf.)

Contracts.

OBJECT.	Contractor.	Price.	CONTRACT.	
			Commenced.	Ends.
Removal of ashes, East Boston	Wm. F. Hedrington	\$7,300 00	January 1, 1899..	April, 1899.
" " " part of West Roxbury	John J. Moore	2,100 00	April 10, 1897....	April 15, 1899.
" " " South Dorchester	Denis Flynn	3,850 00	April 10, 1897....	April 15, 1899.
" " " North Dorchester	Patrick J. Lyons	3,645 00	April 1, 1898.....	April 1, 1900.
" " " house offal, East Boston	Thomas Mulligan	8,000 00	January 1, 1899..	March 1, 1899.
" " " Brighton	George T. Barnes	3,000 00	June 1, 1898.....	June 1, 1901.
" " " part of West Roxbury	George T. Barnes	1,800 00	April 1, 1898.....	April 1, 1901.
" " " " Dorchester	John Bradley	4,980 00	May 11, 1897.....	May 12, 1900.
" " " sea wall, etc., Fort Hill Wharf	W. H. Ellis & Co.	3,376 00	November 1, 1898.	Work finished.
Building platform, etc., Fort Hill Wharf	W. H. Ellis & Co.	2,843 33	September 2, 1898.	"
Dredging new dock at Fort Hill Wharf	Eastern Dredging Com- pany			"
Building platform over dock, Albany street	Thomas E. Ruggles	1,260 00	July 14, 1898	"
Lease of wharf, Atlantic avenue	Jacob H. Hecht	5,470 00	January 16, 1899.	"
Destruction of house offal	New England Sanitary Product Company	10,000 00	March 1, 1898....	March 1, 1908.
Destruction of waste and rubbish	The City Refuse Utiliza- tion Company	47,400 00	June 1, 1898.....	June 1, 1908.
		5,500 00	December 1, 1898.	December 1, 1908.

Material Sold by Contract.

OBJECT.	Contractor.	Price.	Payments made to City Collector.
Manure of horses at South Yard	G. A. Safford	\$2 00 a horse per year.	\$224 44
" " " " West and Charlestown Yards	Geo. P. Winn	2 00 " " " "	190 00
" " " " Highland Yard	J. A. Budlong & Son	1 00 " " " "	69 00

DIVISION REPAIR SHOPS.

Located at the South End yards, situated at No. 650 Albany street. At these shops all of the repairs on carriages, carts, wagons, etc., are made, together with the painting of the same; all harnesses are repaired and many made, and a portion of the horseshoeing done.

The mechanics in these shops are engaged also in making repairs on the vehicles, etc., sent by the different divisions of the Street Department; all street signs are painted for the Paving Division, and a certain amount of the horseshoeing is done for the several divisions.

WHEELWRIGHT SHOP.

Cost to maintain during the past year the sum of \$10,095.60, of which amount \$4,097.73 was expended for labor and \$5,997.87 for stock. The carts, wagons and other vehicles of the division were properly overhauled when in need of repairs, and the entire lot of ash and offal sleds were put in proper working order. Of the above amount expended in maintaining these shops the following amounts were charged off to the several divisions, and others, for repairing, altering and putting in good condition their carts, wagons, watering-carts, sleds, etc.:

Paving Division	\$2,803 09
Sewer Division	1,105 14
Street Cleaning Division	13 01
Bridge Division	68 76
Street Watering Division	167 95
Central Office	174 55
County of Suffolk	25 89
Public Buildings Department, Repairs Division	155 87
	<u>\$4,514 26</u>

This leaves a net cost of \$5,581.34 for the repairs and construction of all work of this character for the Sanitary Division.

There are employed in this shop four wheelwrights and one helper.

BLACKSMITH SHOP.

Cost to maintain during the past year the sum of \$8,401.50, of which amount \$5,189.33 was expended for labor and \$3,212.17 for stock. The carts, wagons and other vehicles of the division were properly overhauled when in need of repairs, and the entire lot of ash and offal sleds were put in proper working order. Of the above amount expended in maintaining these shops the following amounts were charged off to the several divisions for repairing, altering and putting in good condition their carts, wagons, watering-carts, sleds, etc.:

Paving Division	\$1,164 25
Sewer Division	1,786 25
Bridge Division	69 15
Street Watering Division	409 32
Central Office	158 16
County of Suffolk	54 89
Public Buildings Department, Repairs Division	105 94
	<u>\$3,747 96</u>

This leaves a net cost of \$4,653.54 for the repairs and construction of all work of this character for the Sanitary Division.

There are employed in this shop six blacksmiths and one helper.

PAINT SHOP.

Cost to maintain \$9,095.71, of which amount \$7,489.14 was expended on labor and \$1,606.57 for stock. The work done by this shop was the painting and lettering of that which was either built or repaired in the wheelwright or blacksmith shops, together with 1,186 different styled signs that were painted for the Paving Division. Of the above amount expended for maintaining this shop, the following amounts were paid by the several divisions of the departments for painting carts, wagons, buggies, signs, etc.:

Paving Division	\$2,281 68
Sewer Division	1,145 07
Street Cleaning Division	921 04
Bridge Division	26 00
Street Watering Division	126 56
Central Office	156 92
County of Suffolk	78 40
Public Buildings Department, Repairs Division	69 50
	<u>\$4,865 17</u>

Leaving the balance, \$4,290.54, as the cost of this work for the Sanitary Division.

This shop employs seven painters and three helpers.

HARNESS SHOP.

Cost to maintain \$5,330.59, of which amount \$2,961.74 was expended for labor and \$2,368.85 on stock; part of the work sent to the blacksmith and wheelwright shops was also repaired here, such as Goddard and Concord buggies, leather seats for wagons, etc., together with all the new pieces of harness made for the several divisions. The entire lot of old and new harness owned by the Sanitary Division has during the year been overhauled, repaired and oiled at this shop. Of the above amount paid out for maintaining this shop the amounts charged to the several divisions of the department for work done were as follows:

Paving Division	\$113 48
Sewer Division	991 06
Street Cleaning Division	363 79
Bridge Division	22 01
Street Watering Division	120 74
Central Office	114 95
County of Suffolk	10 39
Public Buildings Department, Repairs Division	24 87
	<u>\$1,764 89</u>

Leaving balance, \$3,565.70, as the net cost of work done for the Sanitary Division.

This shop employs three harness-makers and one helper.



SOUTH END YARD — FARMERS PURCHASING OFFAL — OLD METHOD.

HORSESHOEING SHOPS.

Cost to maintain during the past year: South Yard, \$4,150.31; West Yard, \$2,435.15; of which amount, \$2,998.97 was expended for labor at South Yard, and \$1,932.41 at West Yard, and for stock at South Yard \$1,151.34, and for West Yard \$502.72. All of the horses at the South Yard, together with the Street Cleaning Division horses stabled there, as also some of the horses located in the different stables of this division, and of other divisions of this department, are shod at these shops, and for which the several divisions were charged the following amounts:

	South Yard.	West Yard.
Paving Division.....	\$205 00	\$5 75
Sewer Division.....	442 50	307 75
Street Cleaning Division	1,015 00	868 00
Central Office.....		245 50
County of Suffolk.....		112 50
Public Buildings Department, Repairs Division	6 00	61 00
	\$1,668 50	\$1,600 50

Leaving balance of \$2,481.81, South Yard, as the cost to the Sanitary Division for this class of work.

Leaving balance of \$835.63, West Yard, as the cost to the Sanitary Division for this class of work.

These shops employ three horseshoers at South Yard and two at West Yard.

Cost of Horseshoeing.

		Division Shops.	Outside Shops.
Stock	\$1,654 06		
Labor.....	4,931 38		
		\$6,585 44	\$2,750 41

KIND AND STYLE.	DIVISIONS.							TOTAL.
	Sanitary Division.	Street Cleaning Division.	Sewer Division	Paving Division.	Central Office.	County of Suffolk.	Public Buildings Department, Repairs Division.	
New shoes...	5,808	2,887	1,054	310	381	193	113	10,746
Bar shoes....	114	20	59	1	.....	.....	.....	194
Resets	1,088	436	262	61	74	8	6	1,935
Leathers	2,409	1,204	403	58	118	71	34	4,297

Average cost per shoe, 46 cents. West Yard, average cost per shoe, 44 cents. South Yard, average cost per shoe, 47 cents.

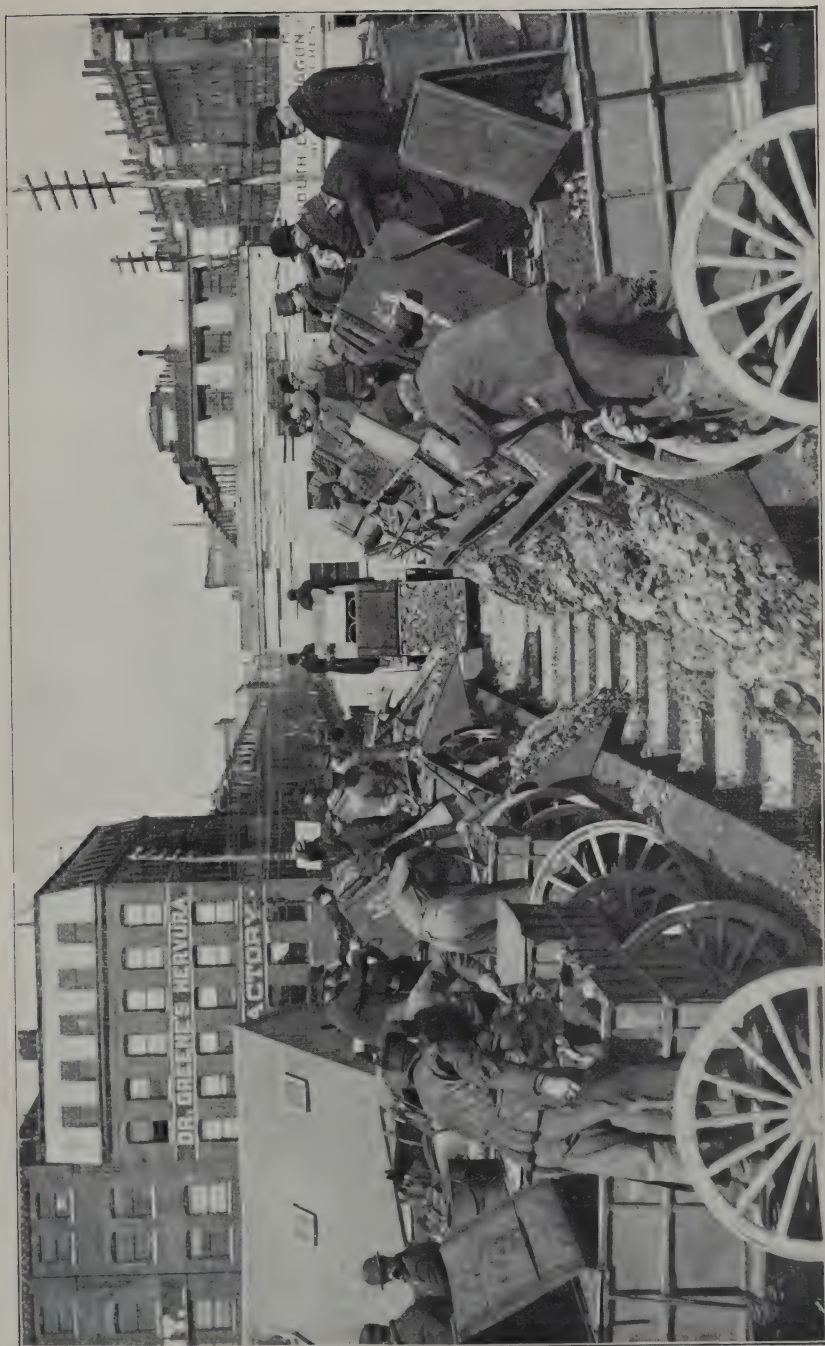
Table showing the Amounts Paid for the Different Kinds and Character of Work Performed by the Sanitary Division for the Several Other Divisions of the Street Department, and Others.

	Paving Division.	Sewer Division.	Street Cleaning Division.	Street Watering Division.	Bridge Division.	Central Office.	Public Buildings, Repairs Division.	County of Suffolk.	City Engineer's Department.	Totals.
Wheelwright shop.....	\$2,863 09	\$1,105 14	\$13 01	\$167 95	\$68 76	\$174 55	\$155 87	\$25 89	.....	\$4,514 26
Blacksmith ".....	1,164 25	1,786 25	.....	409 32	69 15	158 16	105 94	54 89	.....	3,747 96
Harness ".....	113 48	591 06	363 79	120 74	22 01	114 95	28 47	10 39	.....	1,764 89
Paint ".....	2,281 68	1,145 07	921 04	126 56	26 00	156 92	69 50	78 40	.....	4,805 17
Horseshoeing shop, south.....	205 00	442 50	1,015 00	.....	.....	.....	6 00	.....	.....	1,688 50
" " west.....	5 75	307 75	868 00	.....	.....	245 50	61 00	112 50	.....	1,400 50
Dumping boats.....	.....	777 44	4,348 80	.....	.....	.....	.....	.....	.....	5,126 24
Hay, grain, straw, etc.....	.....	.....	1,509 42	.....	.....	.....	.....	.....	.....	1,509 42
Feeders, watchmen and stablemen.	.....	.....	1,216 17	.....	.....	.....	.....	.....	.....	1,216 17
Water, fuel, light, etc.....	.....	.....	601 06	.....	.....	.....	.....	.....	.....	601 06
Removing snow.....	3,242 52	262 00	.....	.....	.....	.....	.....	.....	.....	3,242 52
Horses, Nos. 522 and 584.....	.....	.....	29 72	.....	.....	.....	.....	.....	.....	29 72
Telephone at Highland yard	.....	.....	119 39	6 28	42 94	.....	.....	.....	.....	638 57
Board and care of new horses.....	234 61	285 65	.....	.....	.....	.....	.....	.....	.....	105 75
Registering carts.....	165 75	.....	.....	.....	.....	.....	.....	.....	.....	1,406 68
Board and care of horses.....	.....	51 43	.....	34 65	.....	.....	280 00	1,040 00	.....	180 00
Two two-seated wagons.....	.....	180 00	.....	.....	.....	.....	.....	.....	.....	.....
Bills of Water and Public Buildings	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Departments, Repairs Division.....	.....	.....	268 07	.....	.....	.....	.....	.....	.....	268 07
Birch broom stock.....	7 00	.....	.....	.....	.....	.....	.....	.....	.....	7 00
Filling marsh land on Sweet street.	.....	.....	.....	.....	.....	.....	.....	.....	\$104 50	104 50
Filling Highland Park.....	.....	.....	.....	.....	.....	.....	.....	.....	120 00	120 00
Totals.....	\$10,163 13	\$7,284 29	\$11,264 47	\$865 50	\$228 86	\$850 08	\$706 78	\$1,322 07	\$224 50	\$32,009 68

Table showing the Number and Variety of Vehicles, etc., belonging to the Several Divisions of the Street Department, on which Repairs were made at the Wheelwright Shop of the Sanitary Division.

From January 28, 1898, to January 26, 1899.

KIND.	DIVISIONS.					OTHER DEPARTMENTS.		Total.
	Paving.	Sewer.	Sanitary.	Street Watering.	Central Office.	Public Buildings Department, Repairs Division.	County of Suffolk.	
Carts	23	6	194					223
Half moon iron carts.....		2						2
Double tip carts.....	6							6
Iron tip carts.....			18					18
Paper carts.....			9					9
Street watering carts.....	3			7				10
Express wagons	1	29	9			1		40
Market wagons.....			3					3
Wooden offal wagons			75					75
Two-horse wagons.....							4	4
Two-horse cesspool wagons		1						1
Double jiggers	1							1
Sleighs	1	7	3					11
Double-runner pungs			1					1
Offal sleds			17					17
Ash sleds			60					60
Goddard buggies.....	12	11	8	1		2		34
Box buggies.....	4	3	4	2	1			14
Concord buggies	9	31	21	5	4	1		71
Stanhope buggies.....					3			3
New sleds.....			5					5
New carts.....			7					7
New paper carts.....			11					11
Barge		1						1
Two-seated wagons.....		9	1					10
Derricks.....	2	2						4
Sectional rollers.....	5							5
Snow levelers.....	2							2
Patrol carts	2							2
Offal wagons			2					2
Total	71	102	448	15	8	4	4	652



UNLOADING GARBAGE — SHOWING OLD AND NEW STYLE CARTS.

Table showing the Number and Variety of Vehicles, etc., belonging to the several Divisions of the Street Department, and others, on which Repairs were made at the Blacksmith Shop of the Sanitary Division.

From January 28, 1898, to January 26, 1899.

KIND.	DIVISIONS.						OTHER DEPARTMENTS.		Total.
	Paving.	Sewer.	Sanitary.	Bridge.	Street Watering.	Central Office.	Public Buildings Department, Repairs Division.	County of Suffolk.	
Carts	21	4	296	...	...	...	...	...	321
Half-moon iron carts	...	16	...	...	...	...	...	...	16
Double tip carts	5	2	...	...	...	...	...	...	7
Paper carts.	2	...	40	...	...	...	...	...	42
Street watering carts	3	...	...	...	17	...	...	...	20
Express wagons	2	32	12	4	...	...	4	...	54
Market wagons	...	...	10	...	...	...	...	...	10
Wooden offal wagons.	...	...	122	...	...	...	...	...	122
Iron offal wagons.	...	...	62	...	...	...	...	...	62
Two-horse offal wagons	...	...	8	...	...	...	...	...	8
Two-horse cesspool wagons.	...	7	...	...	...	...	...	...	7
Two-seated wagons.	...	2	1	...	...	...	...	...	3
Double jiggers.	3	...	...	...	...	...	...	...	3
Sleighs	...	6	3	...	1	1	...	...	11
Double-runner pungs.	1	2	1	...	...	...	...	...	4
Offal sleds	...	...	17	...	...	...	...	...	17
Ash sleds	...	...	71	...	...	...	...	...	71
Goddard buggies	10	14	13	3	2	5	3	...	50
Box buggies	3	1	7	1	2	5	...	...	19
Concord buggies.	18	33	30	5	...	13	...	...	104
Corning buggies	...	1	...	...	...	...	...	...	1
Stanhope buggies.	...	...	1	...	...	5	...	...	6
Top buggies	...	...	2	...	...	...	...	...	2
Sectional rollers.	6	...	...	...	...	...	...	...	6
Snow levelers.	2	...	...	...	...	...	...	...	2
Barges	...	2	...	...	...	...	...	...	2
Prison vans.	...	...	...	...	...	...	...	6	6
New offal chisels.	...	...	37	...	...	...	...	...	37
Total	76	127	733	13	22	29	7	6	1,013

Table showing the Number and Variety of Vehicles, etc., Belonging to the Several Divisions of the Street Department, and others on which Work was Performed by the Paint Shop of the Sanitary Division.

From January 28, 1898, to January 26, 1899.

KIND.	DIVISIONS.							OTHER DEPARTMENTS.		Total.
	Paving.	Sewer.	Sanitary.	Street Cleaning.	Bridge.	Street Watering.	Central Office.	Public Buildings Department, Repairs Division.	County of Suffolk.	
Carts	29	3	114	43	...	...	...	...	...	189
Half-moon iron carts.....	...	8	...	...	...	...	...	...	...	8
Double-tip carts.....	4	...	...	...	...	...	...	...	...	4
Paper carts.....	2	...	38	...	...	...	...	...	...	40
Street watering carts.....	3	...	...	14	...	10	...	...	...	27
Express wagons.....	3	19	7	1	2	...	...	2	...	34
Market wagons.....	...	...	3	...	...	...	...	...	...	3
Wooden offal wagons.....	...	...	88	...	...	...	...	...	...	88
Iron offal wagons.....	...	...	27	...	...	...	...	...	...	27
Two-horse stone wagons.....	2	...	...	...	...	...	...	...	...	2
Two-horse cesspool wagons.....	...	4	...	...	...	...	...	...	...	4
Two-seated wagons.....	...	1	1	...	...	...	...	...	...	2
Double jiggers.....	4	...	...	...	...	...	...	...	...	4
Sleighs	2	5	2	1	...	...	...	...	...	10
Double-runner pungs.....	3	...	...	...	...	...	...	...	...	3
Offal sleds.....	...	...	17	...	...	...	...	...	...	17
Ash sleds.....	...	...	61	...	...	...	...	...	...	61
Goddard buggies.....	8	15	6	...	1	2	3	2	...	37
Box buggies.....	2	2	3	1	1	1	4	...	...	14
Concord buggies.....	12	32	16	6	2	...	9	...	...	77
Stanhope buggies.....	...	1	2	...	...	...	3	...	...	6
Push-cart tubs.....	...	...	...	6	...	...	...	...	...	6
Sweeping machine.....	...	...	...	1	...	...	...	...	...	1
Double sweeping machines.....	...	...	...	8	...	...	...	...	...	8
Prison van.....	...	...	...	...	...	...	...	...	3	3
Barges	...	2	...	...	...	...	...	...	...	2
Street rollers.....	5	...	...	...	...	...	...	...	...	5
Total.....	79	92	385	81	6	13	19	4	3	682

Table showing the Number and Variety of Signs Painted for the Several Divisions of the Street Department by the Paint Shop of the Sanitary Division.

From January 28, 1898, to January 26, 1899.

KIND.	DIVISIONS.						OTHER DEPARTMENTS.		Total	
	Paving.	Sewer.	Sanitary.	Street Cleaning.	Bridge.	Street Watering.	Central Office.	Public Buildings Department. Repairs Division.		County of Suffolk.
Style No. 1	59	.....	.....	.....	.....	.....	.....	.....	.....	59
“ 2.....		.....	.....	.....	.....	.....	.....	.....	.....	
“ 3.....	379	.....	.....	.....	.....	.....	.....	.....	.....	379
“ 4.....	20	.....	.....	.....	.....	.....	.....	.....	.....	20
“ 5.....	84	.....	.....	.....	.....	.....	.....	.....	.....	84
“ 6.....	114	.....	.....	.....	.....	.....	.....	.....	.....	114
“ 7.....	83	.....	.....	.....	.....	.....	.....	.....	.....	83
“ 8.....	4	.....	.....	.....	.....	.....	.....	.....	.....	4
“ 9.....	63	.....	.....	.....	.....	.....	.....	.....	.....	63
“ 10	196	.....	.....	.....	.....	.....	.....	.....	.....	196
“ 11.....	21	.....	.....	.....	.....	.....	.....	.....	.....	21
“ 12.....		.....	.....	.....	.....	.....	.....	.....	.....	
Special	4	.....	.....	2	.....	.....	.....	.....	.....	6
	1027	.....	.....	2	.....	.....	.....	.....	.....	1,029

Table showing the Number of Articles and the Variety of Work Performed for the Several Divisions of the Street Department and Others at the Harness Shop of the Sanitary Division, from January 28, 1898, to January 26, 1899.

KIND.	DIVISIONS.							OTHER DEPARTMENTS.		Total.
	Paving.	Sewer.	Sanitary.	Street Cleaning.	Bridge.	Street Watering.	Central Office.	Public Buildings, Repairs Division.	County of Suffolk.	
Harness, parts of, repaired..	1	150	927	287	....	8	23	.....	2	1,398
Harness, new parts made....	....	16	53	15	....	4	4	.....	5	97
" new.....	....	....	1	....	....	....	....	.....	....	1
Buggies repaired, Goddard..	10	12	11	....	2	2	1	3	.....	41
" " box.....	1	1	1	1	....	2	1	.....	....	7
" " Concord...	8	17	11	2	1	....	4	.....	....	43
" " Stanhope..	....	1	....	....	....	....	3	.....	....	4
Sleighs repaired.....	....	3	....	....	....	1	1	.....	....	5
Wagons repaired, express....	3	17	3	....	1	....	....	2	.....	26
" " two-seated, ....	....	1	1	....	....	....	....	....	....	2
Cart repaired, half-moon iron, ...	....	1	....	....	....	....	....	....	....	1
" " street-watering	1	....	....	....	....	....	....	....	....	1
Horses numbered	13	18	17	7	2	....	3	.....	....	60
" renumbered....	2	1	3	2	....	....	....	....	....	8
Saddle pads made.....	1	2	64	6	....	....	....	....	....	73
Collar " " .....	....	....	67	21	....	....	....	....	....	88
Sweat collars " .....	....	2	48	....	....	....	....	....	....	50
Muzzles " .....	....	....	2	....	....	....	....	....	....	2
Calking-boots " .....	....	....	3	....	....	....	....	....	....	3
New halters " .....	....	4	....	....	....	....	....	....	....	4
Carriage boots made and re- paired .....	....	2	1	....	....	....	1	.....	....	4
Interfering boots made .....	....	....	3	....	....	2	2	.....	....	7
Weight straps " .....	....	3	1	2	....	3	....	....	....	9
Hame straps, single, made....	....	18	10	....	....	....	....	....	....	28
" " double, " .....	....	....	5	....	....	....	....	....	....	5
Carriage covers made.....	....	....	....	1	....	....	3	.....	....	4
Leathers for oil covers made. ....	....	....	67	....	....	....	....	....	....	67
Carpet blankets made.....	....	....	23	....	....	2	....	....	....	25
Stable blankets repaired.....	....	10	178	....	....	2	....	....	....	190
<i>Carried forward.....</i>	40	279	1,500	344	6	26	46	5	7	2,253

Work of Harness Shop. — *Concluded.*

KIND.	DIVISIONS.							OTHER DEPARTMENTS.		Total.
	Paving.	Sewer.	Sanitary.	Street Cleaning.	Bridge.	Street Watering.	Central Office.	Public Buildings, Repairs Division.	County of Suffolk.	
<i>Brought forward</i>	40	279	1,500	344	6	26	46	5	7	2,253
Buffalo robes repaired.....		2	3							5
Whips repaired.....		2					2			4
Cart-covers repaired.....			152							152
Oil-covers “.....			10							10
Harness blacked and oiled....		4	252						1	257
Prison wagon.....									1	1
Felt saddle-pads.....		4	2			2	3			11
Leather card-box.....							1			1
Hose for water-cart.....				3						3
Saddle-pads repaired.....				8						8
Lantern covers.....				2						2
Carriage pulls.....		1								1
Safety body belts.....		3								3
Window shades.....		3								3
Wagon cushions.....		2								2
Leather seat for tip-cart.....		1								1
Baggage-strap.....		1								1
Barges repaired.....		2								2
Canopy tops.....		2								2
Wagon shade covered.....		1								1
Hoisting chains covered.....			2							2
Hooks covered.....			4							4
New dust covers.....			122							122
Gleason bridles.....			2							2
New shaft girths.....			52							52
Safety straps, pairs.....			58							58
Shoe boll-boots.....			3							3
Tag straps, new.....	5	3	6	5						19
Dust covers repaired.....			39							39
Leather weight-box.....							2			2
Totals.....	45	310	2,207	362	6	28	54	5	9	3,026

Hay and Grain.

Account of Hay, Grain and Straw Fed Out and Used from January 28, 1898, to January 26, 1899.

YARDS.	MATERIAL.	Pounds.	Total Cost.	Cost per Horse per Day.	Lbs. per Horse per Day.	Horses. Divisions: Sanitary. St. Cleaning.
South-yard Stable.	Hay	465,238	\$3,114 60	\$0.10 ¹⁵ ₃₂₉₀	15 ³² ₃₉₈₃	29,477
	Oats	513,014	5,692 68	.19 ²⁴ ₀₅₇₇	17 ¹¹ ₁₀₆₅	—
	Shorts	11,300	97 30	²⁹ ₉₄₇₇	29 ⁹⁴ ₇₇₀₀	—
	Straw	46,337	266 47	²⁶ ₆₄₄₇	1 ¹¹ ₀₈₆₀	—
	Corn	3,192	23 66	²³ ₆₅₆₇	3 ¹⁹ ₂₂₀₀	—
	Carrots	7,230	39 76	²⁹ ₄₇₇₇	29 ⁴⁷ ₇₇₀₀	—
	Salt.....	.....	6 90	²⁹ ₄₇₇₇	29 ⁴⁷ ₇₇₀₀	—
	English Vegetable Food, 15 bbls. ....	.....	225 00	.....	.....	Average per day. 81
Totals .....	.....	1,046,311	\$9,466 37	\$0.32 ³³ ₇₃₇₇	35 ¹⁴ ₆₁₈	.....
West-yard Stable.	Hay	356,041	\$2,387 57	\$0.12 ¹² ₈₈₂₇	18 ¹⁷ ₁₉₁₁	Sanitary. Repairs Div. 15,038 406
	Oats	260,700	2,872 21	.15 ¹⁵ ₁₈₂₅	13 ¹⁸ ₈₂₅₅	Supt. of Sts. Pur. Agent. 1,947 1,434
	Shorts	4,600	37 80	¹⁸ ₈₂₅₅	3 ¹⁸ ₈₂₅₅	.....
	Straw	56,649	329 41	⁰¹ ₁₈₂₅₅	9 ¹¹ ₄₄₂	.....
	Corn .....	.....	.....	.....	.....	.....
	Carrots	4,540	24 97	²⁴ ₉₇₀₀	1 ⁴⁵ ₄₀₀	Average per day. 18,825
	Salt.....	.....	13 90	¹³ ₉₀₀₀	.....	San., 41 Repairs Div., 1 Supt. of Sts. Pur. Agent. 5 4
	English Vegetable Food, 5 bbls. ....	.....	75 00	⁷⁵ ₀₀₀₀	.....	.....
Totals .....	.....	682,530	\$5,740 86	\$0.30 ³⁰ ₁₈₈₂₅	36 ¹⁸ ₈₂₅	.....



GARBAGE REDUCTION PLANT AT COW PASTURE.

Hay and Grain. — Continued.

Account of Hay, Grain and Straw Fed Out and Used from January 28, 1898, to January 26, 1899.

YARDS.	MATERIAL.	Pounds.	Total Cost.	Cost per Horse per Day.	Lbs. per Horse per Day.	Horses. Divisions: Sanitary. St. Cleaning.
Highland-yard Stable.	Hay.....	246,518	\$1,664 89	\$0.0810558	1212614	17,939
	Oats.....	270,788	2,997 90	.1576132	1314332	Street Watering.
	Shorts.....	5,300	46 95	.008695	2800	97
	Straw.....	63,717	352 77	.0135422	315432	19,492
	Corn.....	18,200	141 38	.0077632	15492	
	Carrots.....	3,610	19 86	.005519	1619	
	Salt.....	.....	1 50	.0001932	19492	Average per day.
	English Vegetable Food, 8 bbls. ....	.....	120 00	.0012000	.....	49
Totals.....	.....	608,133	\$5,345 25	\$0.2782411	314881	Street Watering, ⁹⁷ / ₃₆₄
Charlestown-yard Stable.	Hay.....	144,813	\$976 46	\$0.11747	163869	5,802
	Oats.....	132,000	1,482 25	.108260	143869	Pur. Agent.
	Shorts.....	2,200	19 90	.00899	2200	45
	Straw.....	21,740	122 04	.018869	26132	
	Corn.....	.....	.....	.....	.....	8,809
	Carrots.....	1,560	8 58	.00558	1560	Average per day.
	Salt.....	.....	45 00	.002889	.....	16
	English Vegetable Food, 3 bbls. ....	.....	.....	.004500	.....	Pur. Agent, ⁴⁵ / ₃₆₄
Totals.....	.....	302,313	\$2,654 23	\$0.304869	343869	

Hay and Grain. — Concluded.

Account of Hay, Grain and Straw Fed Out and Used from January 28, 1898, to January 26, 1899.

YARD.	MATERIAL.	Pounds.	Total Cost.	Cost per Horse per Day.	Lbs. per Horse per Day.	Horses, Divisions: Sanitary. St. Cleaning.
South Boston Stable.	Hay.....	117,094	\$821 20	\$0.132550	19,874	6,048 72
	Oats.....	99,840	1,128 50	.186420	16,132	
	Shorts.....	1,850	17 63	.009500	6,120	
	Straw.....	6,679	39 08	.005800	6,120	
	Corn.....	.....	.....	.003000	1,559	
	Carrots.....	.....	.....	.003000	6,120	
	Salt.....	1,940	10 67	.005500	3,940	
	English Vegetable Food, 3 bbls. ....	.....	2 50	.006667	.....	
	.....	.....	45 00	.007200	.....	
						
Totals.....		227,403	\$2,064 58	\$0.331498	37,963	Average per day. 17 81
					6,120	



UNLOADING GARBAGE — SHOWING NEW METHOD.

Recapitulation.

MATERIAL.	Pounds.	Cost.	HORSES PER DAY.		NUMBER OF HORSES FED.
			Cost.	Fed out, Pounds.	
Hay.....	1,329,704	\$8,964 72	\$0.10	16,613.66	Sanitary Division..... 74,304
Oats.....	1,015,642	11,301 33	.13	12,337.63	Street Cleaning Division..... 4,418
Shorts.....	25,250	219 58		233.23	Superintendent of Streets.... 1,947
Straw.....	195,122	1,109 77	.01	2	Purchasing Agent, horses pur-
Corn.....	21,392	165 04		233.23	chased but not assigned... 1,479
Carrots.....	18,880	103 84		233.23	Repairs Division..... 406
Salt.....		24 80		233.23	Street Watering Division..... 97
English Vegetable Food, 34 bbls..		510 00		233.23	Sewer Division..... 72
Totals.....	2,605,990	\$22,399 08	\$0.27	31,157.53	82,723
74,304 Sanitary Division horses (average number per day)..... 204					
4,418 Street Cleaning Division horses (average number per day)..... 12					
1,947 Superintendent of Streets horses (average number per day)..... 5					
1,479 unassigned horses (average number per day)..... 4					
406 Repairs Division horses (average number per day)..... 1					
97 Street Watering Division horses (average number per day)..... 3.64					
72 Sewer Division horses (average number per day)..... 3.64					
82,723 horses (average number per day)..... 226 13					
at \$.27 $\frac{638.57}{237.53}$ =					
\$20,119 45					
1,196 27					
527 20					
400 47					
109 93					
26 26					
19 50					
\$22,399 08					

PLANT AND PROPERTY IN CHARGE OF THE SANITARY DIVISION.

South City Stables, Shops and Sheds.

Situated on Albany street, opposite Newton street. The lot belonged to the city before being used for this purpose, and contains 90,780 feet.

The stable and buildings connected therewith are of brick. There are also on the premises five wooden sheds, used for storing wagons, etc. The stable is two stories high, with French roof, and has accommodations for 100 horses. Twenty-three horses are kept in sheds. Total original cost, exclusive of land, \$79,089.23.

Connected with stables are blacksmith, wheelwright, paint and harness-makers' shops, in which the wagons, carts, harnesses, etc., used by the department are constructed and kept in repair; also a horseshoeing shop for shoeing the horses of the department located in this section of the city.

Offal Depots.

Erected in 1864, on the wharf fronting on Albany street, opposite Brookline street, on the other side of the dock from that used by the Paving Division. The lot which the building occupies and the yard attached to the same contains 39,511 feet, and belonged to the city before being used for this purpose. Total original cost of building \$18,578.89. This building is used for the deposit of house-offal daily collected in the city carts, and from which it is thence conveyed without the city limits by purchasers.

West Stable and Sheds.

The stable is a brick building, a story and a half high, 128 feet by 50, located on North Grove street, built in 1860, with suitable out-buildings attached to the same. It has accommodations for 90 horses, in stables and sheds. The lot contains about 45,152 square feet. On May 11, 1896, a horseshoeing shop was established for the purpose of shoeing the horses of the department stabled in this section of the city.

Highland Stable.

With accommodations for 72 horses, on the old Almhouse lot, Highland street, containing 81,082 square feet. A part of this stable and adjoining lot is used by the Paving Division. There is on this lot a brick stable, which cost \$88,594.13. On this lot is an offal shed, erected in 1875, at a cost of \$1,160.12.

During the year the stabling of horses in the basement of this building was abandoned, and 15 stalls were placed in the second story of the building at a cost of \$3,000. April 1, 1897, the offal shed erected in 1875 was abandoned and renovated for the purpose of storing wagons and carts.

Charlestown Stable,

with accommodations for 25 horses, is situated on Rutherford avenue; lot contains 17,300 square feet of land; stable built in 1875, cost \$5,083.07; sheds and out-buildings built in 1879.

Fort Hill Wharf.

Containing 21,054 square feet, placed in charge of the Sanitary Division, used as a dumping station for the city's garbage and refuse and as a landing-place for scows, which convey this stuff to sea. There are two dumping-boats, known as the Barney dumping-

scows, and these are in continual use for the above purpose, and are towed to sea by the Street Department steam-tug boat "Cormorant." The tug-boat is also used by the Sewer Division.

A portion of this wharf is used by the Street Cleaning Division as a locker for push patrol-carts, etc.; a part is in charge of the Paving Division, and a portion occupied by a tenant.

Hecht's Wharf.

Situated at 466 to 470 Atlantic avenue, containing about 35,460 square feet, placed in charge of the Sanitary Division under a lease dated March 1, 1898, and extending for a period of ten years. This wharf adjoins and is next to Fort Hill Wharf, and is occupied in part by the New England Sanitary Product Company as a berth for their scows; also by the buildings of the City Utilization Company, for the disposal of waste and rubbish.

Gibson Street Plant.

Containing 42,000 square feet, and situated in Dorchester district, which has been used and occupied by the New England Construction Company for the treatment and disposition of offal, and which is now closed.

The Sanitary Division cares for the horses of the Street Cleaning Division located at Rutherford avenue and Highland street, bearing a proportionate share of the cost of maintaining both of these stables.

Number of Carts and Wagons Collecting House Dirt and Ashes, Waste Rubbish and Offal.

Offal wagons in use by the Sanitary Division .	{ Wood, 73 } { Iron, 33 }	106
" " Thomas Mulligan, East Boston .	. .	6
" " George T. Barnes, Brighton .	. .	6
" " John Bradley, Dorchester { Wood, 11 }	{ Iron, 1 }	12
" " G. T. Barnes, West Roxbury .	. .	3
	—	133
Ash carts in use by the Sanitary Division .		165
" " Wm. F. Hedrington, East Boston .	. .	6
" " J. J. Moore, West Roxbury .	. .	3
" " Patrick J. Lyons, Dorchester .	. .	6
" " Denis Flynn, Dorchester .	. .	6
	—	186
Market wagons in use by the Sanitary Division .		12
Paper carts " " " " .		22
	—	34
Total		353
Ash and offal sleds		180

ORGANIZATION.

1 deputy superintendent.	5 feeders.
5 clerks.	6 messengers.
7 foremen.	10 stablemen.
1 captain of scows.	12 yardmen.
12 sub-foremen.	24 dumpers.
15 inspectors.	3 dumping-boat men.
32 mechanics.	224 ash-cart drivers and helpers.
4 tallymen or aids.	141 offal-cart drivers and helpers.
6 watchmen.	

Total, 508 employees.

APPENDIX E.

REPORT OF THE DEPUTY SUPERINTENDENT OF
THE SEWER DIVISION.

30 TREMONT STREET,
BOSTON, February 1, 1899.

MR. BENJAMIN W. WELLS,
Superintendent of Streets:

DEAR SIR, — I respectfully submit report of expenses, income and operation of the Sewer Division for the financial year ending January 31, 1899.

Yours truly,
CHARLES R. CUTTER,
Deputy Superintendent.

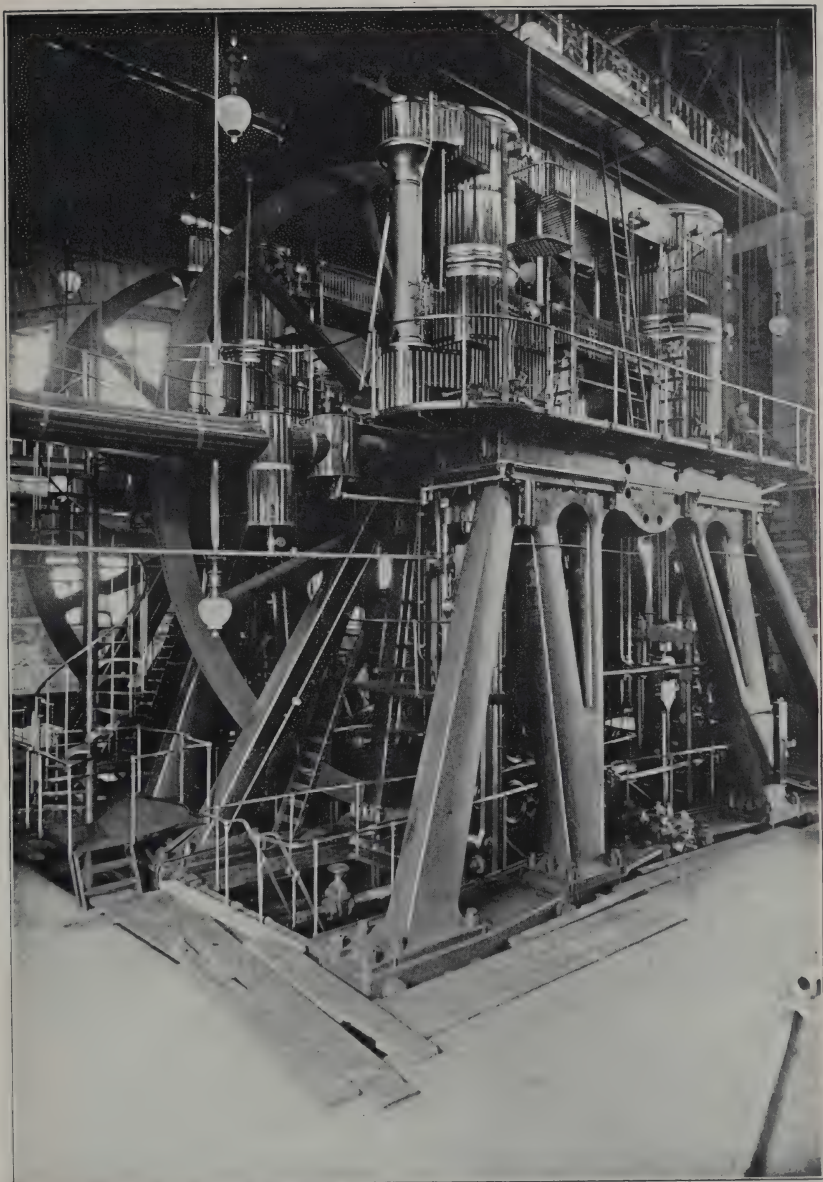
The Sewer Division has charge of the following work:

1. Construction and maintenance of all sewerage works, including Main Drainage Works.
2. Construction and maintenance of the channels of Stony brook.
3. Preparation of plans, and the engineering and supervision required in the construction and maintenance of sewerage works.
4. Investigation of complaints in regard to defective sewerage and surface drainage.
5. The granting of permits for all connections to be made with the common sewers, and the custody of bonds filed by drain layers authorized to make such connections.

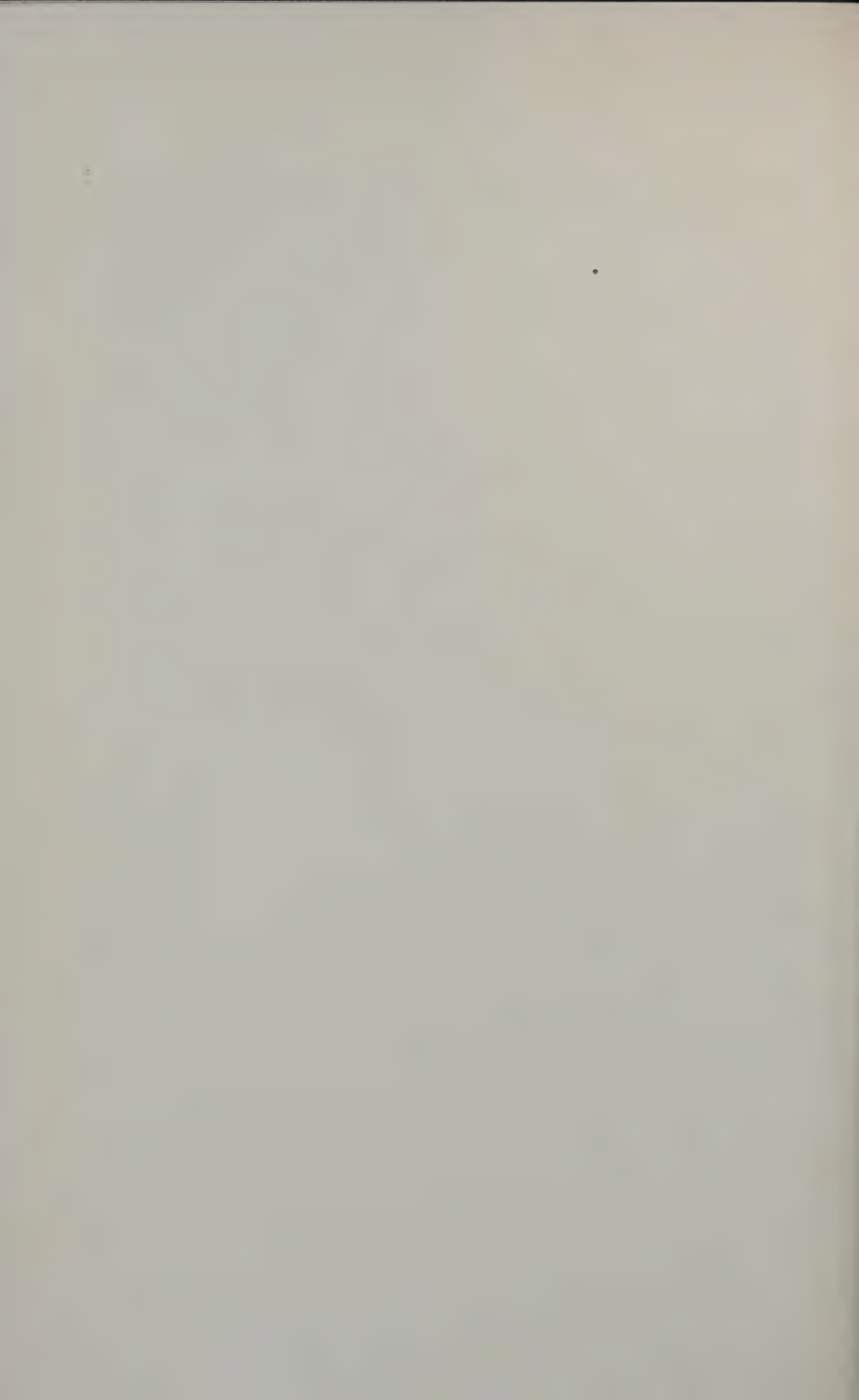
The following table shows the maintenance appropriation of this division for the past ten (10) years:

1889	.	.	.	.	.	\$268,230 00
1890	.	.	.	.	.	347,000 00
1891	.	.	.	.	.	350,000 00
1892	.	.	.	.	.	350,000 00
1893	.	.	.	.	.	350,000 00
1894	.	.	.	.	.	320,000 00
1895	.	.	.	.	.	300,000 00
1896	.	.	.	.	.	280,000 00
1897	.	.	.	.	.	300,000 00
1898	.	.	.	.	.	350,000 00

A general statement of the work done during 1898, and work necessary to be done, is given in the succeeding pages.



LEAVITT ENGINES — PUMPING STATION, SEWER DIVISION.



SOUTH BOSTON.

During the past year the rebuilding of the Kemp-street outlet has been started and 600 feet completed. B-street sewer between Dorchester avenue and Fourth street was rebuilt, affording a proper outlet for sewers in that vicinity, and allowing the rebuilding of many small tributary sewers as the future may demand.

Dorchester-avenue sewer, between D street and Dexter street, and the sewers in Dexter and Ellery streets were also rebuilt, thereby obviating a long-standing source of complaint, and doing away with the temporary sewer overflow into the South bay at D street, the whole flow of this territory being carried to the B and Seventh-streets overflow, which was built last year.

The H-street sewer and overflow were rebuilt between Eighth street and tide-water, affording an adequate outlet for a large district in time of heavy storm, and doing away with the numerous complaints the division has received in the past, of water backing up into the cellars.

In regard to future work the first thing that demands our attention is the effect which the change in location of the New York, New Haven & Hartford Railroad Company will have upon the sewer system. The sewer in Blake street will have to be rebuilt, as it is not strong enough to stand the jarring of the trains which will pass over it. The sewers in Dorchester avenue, Powers street and Boston street are not large enough for the future requirements of the district, but as they will answer for a number of years it is perhaps better policy not to attempt to rebuild them at the present time in anticipation of the raising of the grades of the streets, but to leave this matter for the future, and when the district becomes so well developed as to overcrowd these sewers, to relieve it by running a large main sewer around the artificial hill caused by raising the grades of the streets, finding a location for this sewer in streets which will have to be laid out in the vacant land either to the east or west of Dorchester avenue.

As the filling of Columbia road between City Point and Mt. Vernon street is nearing completion it would be advisable to build the sewers in this road as soon as possible.

The Commonwealth lands on South Boston flats, which by reason of their proximity to the new Union Station will shortly be placed on the market for commercial purposes, will therefore require the attention of this division during the coming year.

The sewer in D street, between Dorchester avenue and Ninth street, and also between Second street and Broadway, should be rebuilt as the sewer is broken down and settled in many places, and is in a bad condition.

EAST BOSTON.

Connection with the Metropolitan sewer has been made at Eagle square and work is in progress at Chelsea street and at Curtis street. The connection with the Metropolitan sewer will be

made at Chelsea street early in the coming year. The sewers in Bennington and Chelsea streets, between Eagle square and Putnam street, are too small to properly drain the territory and should be rebuilt. House sewers and surface drains are needed in the East Boston parkway.

The East Boston low-level sewer should be built as soon as possible to drain the low lying territory at Orient Heights, and to afford an outlet for the sewers in the proposed Bennington-street boulevard and the sewers and surface drains ought to be promptly begun if the construction of this boulevard is ordered.

CHARLESTOWN.

All connections with the Metropolitan sewer have been made in this district, except in Beacham-street district. The Beach-street overflow is in progress, and will be finished early in the coming year. The Beacham-street district should be connected at an early date, and the sewers rebuilt on the separate system using those now in existence for surface drains as far as it is possible.

The sewers in Main and Cambridge streets, from Beach street to the Somerville line, are in a very leaky condition and much too small to satisfactorily drain the territory through which they run. They should be rebuilt at the earliest possible date, or at all events before the grade of Cambridge street is raised in abolishing the grade crossings at this point.

BRIGHTON.

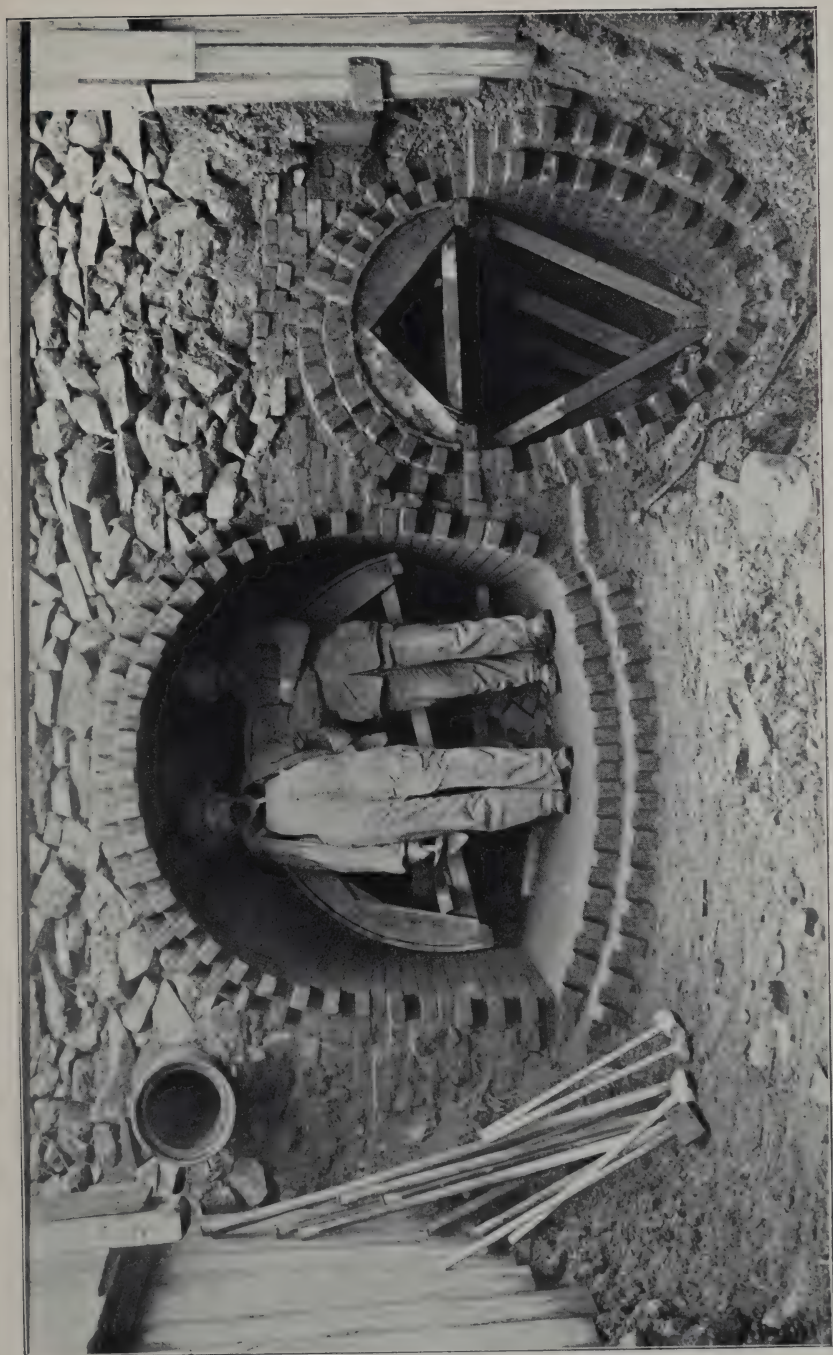
About 600 feet of six feet six inches by seven feet, and 400 feet of six feet by six feet brick conduit for Salt creek, and 1,600 feet of thirty inches by thirty-six inches brick sewer in Cambridge street, between Seattle street and Charles river were built. The outlet for house sewers and surface drains for the part of Commonwealth avenue, between Summit avenue and Kinross road, has been started, and the house sewer system for the Aberdeen district practically completed. During the coming year Commonwealth avenue, between Warren street and Chestnut Hill avenue should have a complete system of house sewers and surface drains, and the surface drainage system for the Aberdeen district should be built.

The Shepard-street brook should be taken in a covered conduit from the pond at the wool-scouring establishment on North Beacon street, near the iron bridge to Shannon street and the Faneuil Valley brook should be improved by deepening and widening from the same pond to Lake street.

The conduit for the Salt Creek brook should also be finished from Charles river to its present terminus at Gardner street.

WEST ROXBURY.

On Goldsmith brook, between Washington and South streets, there were built about 1,600 feet of brick conduit, principally eight



ROSEMONT STREET, DORCHESTER, SHOWING SURFACE DRAIN AND MAIN SEWER.

feet six inches by six feet nine inches. This is the portion of the brook which was subjected to continual flooding at every rain.

Surface drains in Keyes and Lee streets and a conduit in Calder street for Franklin park branch of Stony brook are in progress, as well as house sewers in Walter and Jones streets, South street, near Congreve street, Congreve street, Wachusett street, and outlets for Temple and Perham streets, all of which will be completed early in the coming year. During the coming year sewers should be built in Mendum street, Gardner street, between the Metropolitan sewer and Baker street, and a surface drain in Baker street from Spring street brook to Gardner street. Goldsmith brook conduit should be extended to West Roxbury parkway. Sewers and surface drains in Spring street, between Centre street and Gardner street, are needed, and the West Roxbury low level sewer should be extended beyond Forest Hills.

DORCHESTER.

The most important work done in Dorchester during the past year has been in the way of surface drains of large size to carry the somewhat large brooks which pervade this territory.

This is in pursuance of the recommendations made in former reports. The old sewers, built many years ago, on the "combined" system, were professedly designed only for a small percentage of the total storm-water of the district. Now that new streets are being laid out in every direction, each one with its catch-basins taking the surface water from the gutters, the old sewers refuse to longer carry this additional load. Therefore, a separate system of surface drains for storm water only is imperatively demanded; and this division has made a good beginning in this direction.

The large surface water drain to carry the water of "Tenean creek," commencing (at the lower end) at what is known as "King's Mill pond," in the neighborhood of Harrison square, has been finished nearly up to Charles street, near Field's Corner Station. This will drain out the so-called "Clay-Pits" (back of the car stables), a long standing nuisance, and will afford good surface drainage to Bloomfield and Tonawanda streets and Geneva avenue, and the whole of that neighborhood. A branch of this drain crossing Gibson and King streets and running up through Rosemont street has been well carried up towards its final destination on Carlisle street. For a considerable portion of the way this was built in the same trench with the new outlet house sewer for this region.

A branch of this last-named drain should be extended during the coming season through Shawmut park (now Florida street) to Edwin and Templeton streets.

One thousand seven hundred and fifty linear feet of these drains were built in 1898, making, with what was built in 1897, a total length of 1,960.5 linear feet of conduit, running from 14 feet $\times$ 12 feet to 6 feet $\times$ 6 feet 6 inches in size, built to date.

Another improvement of great importance has been commenced on the "Canterbury branch" of Stony brook, between the West Roxbury boundary line at Harvard (formerly Back) street, and the upper large culvert on Lauriat avenue.

With a view to immediate relief of this district from the winter and spring floods, this improvement, so far, has taken the shape of an open ditch (the excavation for which will all be utilized in building a more permanent channel), with the exception of the portion lying in Callender street, between Lyons and Don streets, where a brick conduit ten feet in diameter is being constructed at a grade of from fourteen to twenty-two feet below the surface; the cutting being in solid rock. This solid construction is adopted so that the grading and curbing of Callender street, under chapter 323 of 1891, can be proceeded with, as ordered by the Board of Street Commissioners.

The whole territory, also, between Lauriat avenue and Norfolk street, especially in the neighborhood of Dumas, Mascot and Willowood streets, is in a state of bad flooding in storms; and although the open ditches we are now cutting there will be invaluable for temporary relief, yet they are shifty and unreliable for a term of years. They should be superseded by brick or concrete channels in the same excavation as soon as funds will allow.

An important feature of this same Canterbury branch, namely, "Oakland Garden Fork," has been under construction all the way from the Franklin Field ditch upward. With the completion of Columbia road from Blue Hill avenue to Stanwood street and of many streets in this vicinity, a large amount of surface water was necessarily carried to this water-course; and during the past year the improvements have been started in several places and should be completed the coming year, so as to take care of all the water coming down from the north-east corner of Franklin Park and through the former Oakland Garden territory, which water has heretofore done much damage by flooding.

Work has also been nearly completed for the surface drain to carry the water of Mattapan brook from Norfolk street through Capen and Fuller streets, near Fairmount, and through Selden street to Morton street. There it can empty into an unoccupied swamp until such time as the construction of the remainder of the "Blue Hill avenue boulevard" provides for the improvement of this brook down to its extreme lower end at the Neponset river.

The whole of the large valley of "Davenport brook," embracing all that territory between Lower Mills and Ashmont, is practically destitute of any system of surface drainage; and the growing demand for catch-basins here, and the bad flooding occurring under the present arrangement, make a large amount of construction imperative here as soon as the necessary funds are provided.

The necessary takings have been made for the improvement of what is called the Freeport-street brook, between Dorchester

bay and Freeport street; this improvement should be started this coming year; and the brook channel, between Talbot avenue and Blue Hill avenue, should receive the attention of the division, as we have received many complaints from the same.

The improvement of the surface drainage for the Devon-street district should also receive our early attention.

The separation of the surface water and the house sewage in the district drained by the Dorchester brook sewer is a very important matter and should be carried along to completion, as we have already started to apply this principle at the upper end of this district.

With the building of the proposed Columbia road at Mt. Vernon street, the old brook channel, between tidewater and Edward Everett square, will necessarily have to be improved, thereby affording an overflow for the Crescent-avenue sewer, which in time of storm is very much overtaxed.

It will be necessary to make an extensive study during the coming year for a gravity outlet for the system of sewers which is now taken care of by the Lyons-street pumping station. When these sewers were built it was the intention of this division eventually to provide an outlet to take their flow by gravity to a tunnel sewer in the vicinity of Park street connecting with the Dorchester interceptor, but during the last year the Metropolitan Sewerage Commissioners have made an extensive study for a high level sewer which will pierce the Stony brook *divide* in the vicinity of Mt. Hope Cemetery, and will be deep enough to afford an outlet for this system of sewers and to connect the Lyons-street pump wells with the Metropolitan high level sewer at this point; this sewer can probably be built considerably cheaper than the proposed Park-street tunnel, and it will therefore become necessary to make surveys to find the best route for such a sewer.

In connection with the building of the south branch of Tenenac brook, the new outlet for Carlisle street, which is designed to relieve the Centre-street tunnel of a part of its overload, has been extended 3,345 feet, making a grand total of 3,460 linear feet to date; 1,820 feet of which are combined with the Rosemont-street surface drain in the same trench.

This outlet will undoubtedly be completed during the coming season, so as to afford much desired relief to the Centre-street tunnel.

One of the most conspicuous cases of house-sewer construction in this district includes the Adams and Richmond-street sewers at Lower Mills, of which 5,295 linear feet in all have been built in 1898.

This will practically round out the sewerage of "Lower Mills Village" for the present; leaving only scattered small portions to be built as called for by future needs.

During the past year the sewer system for Columbia road between Franklin Park and Edward Everett square has been carried on, and with the exception of the outlet in Ceylon street is ready for house connections.

The sewer system for the northern half of Savin Hill has been started and will be pushed to completion during the coming year.

An unusual amount of sewer work was completed this year on account of the improvement of many streets under chapter 323 of the Acts of 1891, etc., and these streets necessarily required attention from the division.

ROXBURY.

The sewer system in Columbus avenue, between Northampton street and Franklin Park, is now complete; the point between Roxbury crossing and Dimock street being the connecting link.

The sewer in Hemenway street has been built and also part of the sewer in passageway in rear of Boylston street that has caused so much trouble.

The surface drain and house drain have been built in Peterborough street; before either can be used it will be necessary to provide an outlet for this street.

The sewer in Halleck street, that has been so often reported in a dangerous condition, has at last collapsed. The sewers in this district are all too high, and to rebuild this sewer at its present grade on the combined system would be a mistake, but in order to lower it it would be necessary to rebuild the 3 feet 9 inches $\times$ 4 feet brick sewer in Ruggles street and Halleck street to the railroad, which is in good condition but too high. It has been decided to build a house sewer in Ruggles street and Halleck street, which will be connected with the intercepting sewer in Ruggles street at the railroad, and build it low enough to be extended all over the district. This has been done in Ruggles street as far as Halleck street, and when the Halleck-street sewer which is over 1,000 feet long is being constructed, the house sewer will be built in the same trench and used as an underdrain, thereby saving the cost of pumping the large quantity of water which is discharged at the breweries. When the proper time arrives the sewers in this district can be changed into the separate system.

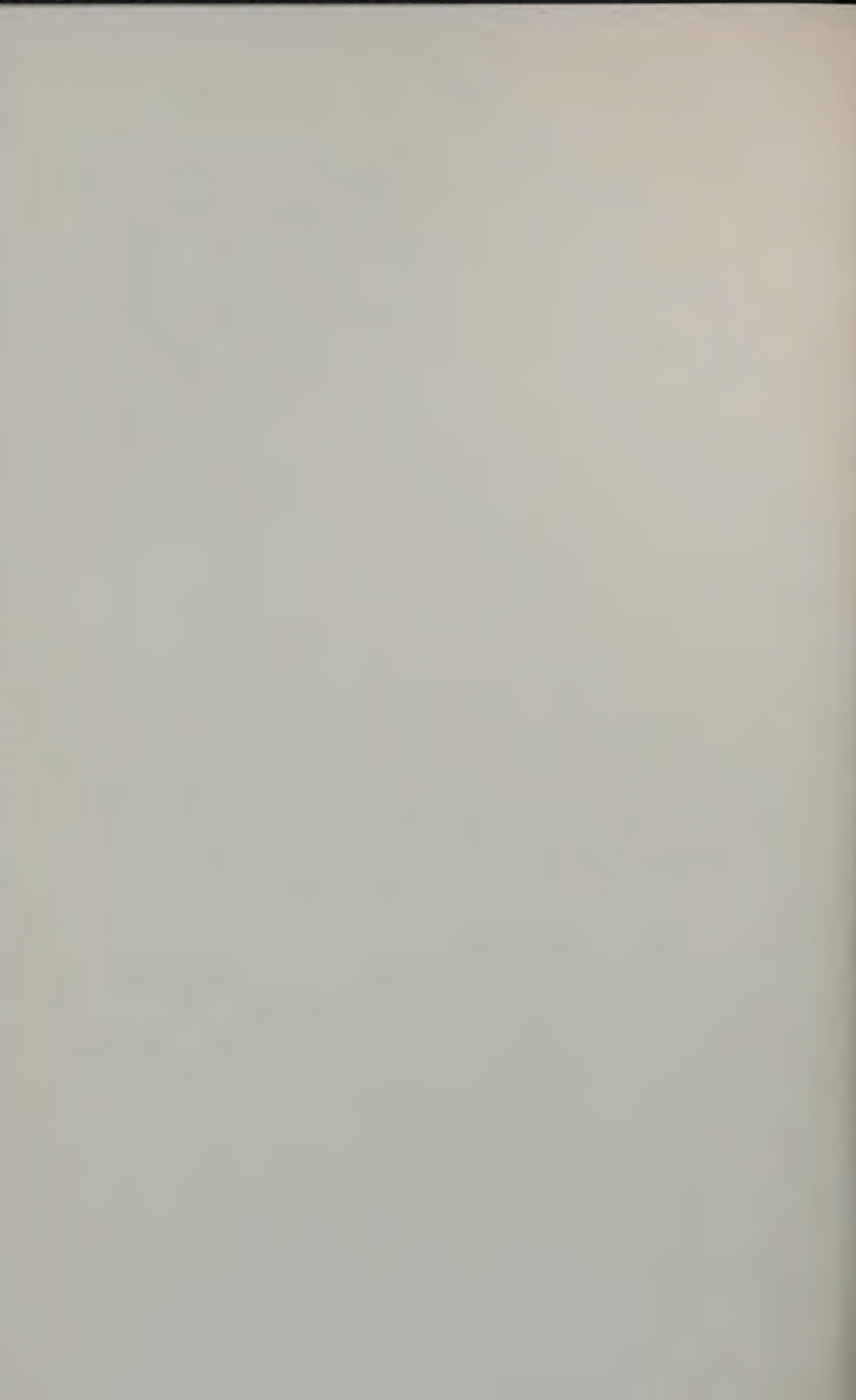
When the water in the Back Bay Fens was lowered for the construction of the Ipswich-street bridge, the deposit brought down by the Stony Brook channel was exposed. The odors arising from this deposit were so objectionable that it was decided to remove it. A large centrifugal pump, boilers, engines, etc., and flexible discharge pipe were built in pontoons and the deposit between Stony Brook channel and the Agassiz bridge was pumped into the Stony brook covered channel below the gate-house and flushed to Charles river, where it was dredged into scows and carried to sea. The cost of this work was \$25,000.

It has been recommended in several previous reports to build house sewers along the side of Stony Brook channel, between Huntington avenue and Elmwood street. This work has not yet been started.

The Muddy River conduit in Brookline avenue should be repaired and a considerable portion of it rebuilt. This will be very expensive work.



STONY BROOK AT BOYLSTON AVENUE, SHOWING BRIDGE CARRIED AWAY BY FLOOD.



A surface drain should be built in Heath street, between Huntington avenue and Lawn street. When this work is done there will be less trouble with the syphon at the Parkway which is continually being cleaned of the gravel which washes from Parker Hill.

The surface drains in the South Huntington avenue system are still connected with the sewer in Heath street.

Nothing has been done about the overflow or surface drain for the Vila street district.

Jersey street is to be the outlet for the entire surface drain system of the Back Bay lands, bounded by Brookline avenue, B. & A. R.R. and the Parkway. The outlet will drain into the Muddy River conduit in Brookline avenue; it will be a 4 feet 9 inches circular brick drain. This size is required to provide for water which should drain into the Muddy river channel (the natural outlet) through smaller drains. This will be a very expensive piece of work. Piles from 20 to 35 feet in length will be required for a foundation. An expensive tide-gate will be required to keep the tide which may rise to grade 15 from flooding the passageways, yards and cellars. The catch-basins in the passageways will be grade 13. This drain should now be built, as the drains built on Boylston street, Peterborough street and Ipswich street now drain on to private land. The house sewer for Jersey street will be in the same trench as the surface drain.

Boylston-street extension is in an unfinished condition. The house drains have not been built. The surface drain discharges on to the land at the side of the street and cannot be provided with an outlet until Jersey street drain is built.

Peterborough street sewers and drains are built, but there is no outlet. A sewer is required in Jersey street, connecting this sewer with the Boylston street sewer; and the catch-basin drain must wait for the Jersey street drain.

Ipswich street has all its sewers and drains built, with the exception of the house drains. This sewer is connected with the Boylston street sewer, but the surface drain discharges on to the land and must wait for the Jersey street system and a surface drain in a proposed street, from Jersey street, parallel to Boylston-street extension.

Sewers and surface drains have been built in the Francis street district, which is to be changed into the separate system. A surface drain has been built which drains into Muddy river, and a house sewer has been built in the Riverway drive which is to connect with the Brookline sewer at Francis street the coming year.

Sewers in the old Francis-street district are on the combined system and discharge into the Brookline sewer without an overflow; on account of the elevation of the district above the outlet, there has been no flooding.

Streets in the low part of the district (which lies to the south of Francis street) have been built, and, if the sewers were to be built on the combined system, they would receive the storm water

from the old district and cellars would be flooded. It has therefore been decided to build new sewers on the separate system and run a system of surface drains over the old district.

The outlet for these sewers is carried across Muddy river to the Brookline sewer; this outlet is too small for the whole district and will have to be enlarged; this will be done by carrying another pipe across the river alongside the present sewer; if complications had not arisen with the Boston and Albany Railroad, this would have been done during the present year.

The most important sewers completed during the past year in the southern part of this district were the relief sewer for the Notre Dame street district which has suffered for many years from floods of surface water; the rebuilding of the Haskins street sewer which was found in a very bad condition and from which we have received numerous complaints in the past; the much called for sewer in Benton street, thereby abating a nuisance of long standing, and the completion of the long-needed Harrison avenue sewer, thereby allowing the city to rectify the sewer system of the adjacent territory.

During the past year we have received numerous complaints from the sewers in Cottage terrace and Marshfield street, and, after an examination of the same, found that they should be rebuilt, as they have settled and become so distorted that it is impossible to clean them.

The outlet for the proposed sewer in Ritchie street has been completed during the past year, and by building the sewer in Ritchie street we will relieve a large area from which we have received numerous complaints.

During the coming year the Sherman street district should be attended to, as the sewers in this district are much too small and a suitable outlet should be built, thereby relieving a large district.

This matter has been recommended for the past seven years and is a much needed public improvement.

CITY PROPER.

The Canal Street Relief Sewer was built in 1896 in Central street; it has been carried on through India, Commercial and Clinton streets; this year it was built in Fulton and Cross streets. As fully described in last years' report, the route of the sewer was changed from Blackstone street to Cross street. In crossing Hanover street, a section was built which will allow the proposed subway to pass over the sewer. It was found to be impracticable to construct this crossing without making a syphon with a depression in grade of at least eleven inches. The arch of the sewer is flat, being constructed of iron "I" beams embedded in concrete. The sewer has been constructed to within about one hundred feet of Endicott street and will be completed the coming year to Canal street at Traverse street.

The Kneeland street sewer has been completed; the South street sewer is within a few feet of completion at Harvard street;

and the district regulator in Dewey square is ready for its machinery. When these things are finished, and the small regulator at Oswego street is built, the change in the sewer system at the Southern station will be completed for the present, but eventually this district should be changed to the separate system. The district regulator at Dewey square, when completed, will take the place of the present regulator at Dover street, and should greatly help the district between Dover street and Essex street, covering an area of 164 acres which will then be below, instead of above, the regulator. This benefit will be more fully appreciated when the changes in the Pumping Station and the extension of the Reservoirs at Moon Island are completed.

That portion of the intercepting sewer which was in the line of the subway, on the Terminal Company's ground near Federal street bridge, has been destroyed and a new sewer 235.5 feet in length has been built by this Division and paid for by the Terminal Company.

Work has been started on the sewer system of Charlestown street. The eighteen-inch pipe sewer on the east side, from Causeway street to Stillman street, has been built, but will not be in use until the Canal Street Relief Sewer reaches this point. The sewer on the west side cannot be built until the buildings are removed.

Canal street has been laid out, the catch-basins have been built and connected with the old sewer which will be rebuilt when the Canal Street Relief Sewer reaches this street at Traverse street.

The old wooden sewer in Way street, destroyed by the widening of the Boston and Albany location for the N.Y., N.H. & H. R.R., has been replaced with a twelve-inch pipe sewer by the N.Y., N.H. & H. R.R., at their expense.

A sewer is needed in Albany street from Wareham street toward Plympton street.

The sewer in Hanover street crosses Washington street under the subway in a syphon and discharges through the Friend street sewer which is seven feet higher than the syphon. The grade of the syphon was so placed that the sewer from its outlet could be carried down Hanover street to the Canal Street Relief Sewer in Cross street, when the relief sewer should reach that street. The Canal Street Relief Sewer is now ready and the connecting sewer should be built, unless the proposed subway in Hanover street is going to be built immediately, in which case the sewer should be built in connection with it.

Sewers in North street, India street, Milk street, and adjoining streets, Commercial street to Clark street, and Salem street, should be rebuilt.

MOON ISLAND.

Of the estimated amount of excavation to be done on the extension of reservoir, 152,497 cubic yards, or about 95 per cent., have been taken out. The easterly wall of the reservoir is completed, and one-third of the southerly wall. Three-quarters

of the easterly division wall is completed, and one-third of the foundation of the centre division wall is in place. The masonry is completed in gate chamber No. 4.

The roadway embankment at southerly end of reservoir has been filled to grade 17, and the gravel filling and ballast on slope is in place. Two-thirds of the ballast placed is covered with rip-rap.

Two hundred and ten linear feet of flushing sewer have been built; 610 linear feet of ten-inch and fifteen-inch drain pipe have been laid, and three (3) manholes built.

The twenty-four-inch iron and earthen pipe for tide gate chamber outlet has been laid.

About 111,000 cubic yards of waste material have been deposited for filling back of sea wall.

The storm of November 27 did considerable damage to the outfall sewer embankment between the island and Squantum, by washing away the gravel above the rip-rap to the extent of about 4,000 cubic yards. As there was some wash above the rip-rap before by storms of less magnitude, it was considered advisable, when repairing the bank, to place slope paving on the bank to grade 18, to protect it in the future. Four hundred linear feet of filling and paving have been placed to date.

The floor of the gate-house at the outlet was destroyed, and the joints of the masonry started during the same storm.

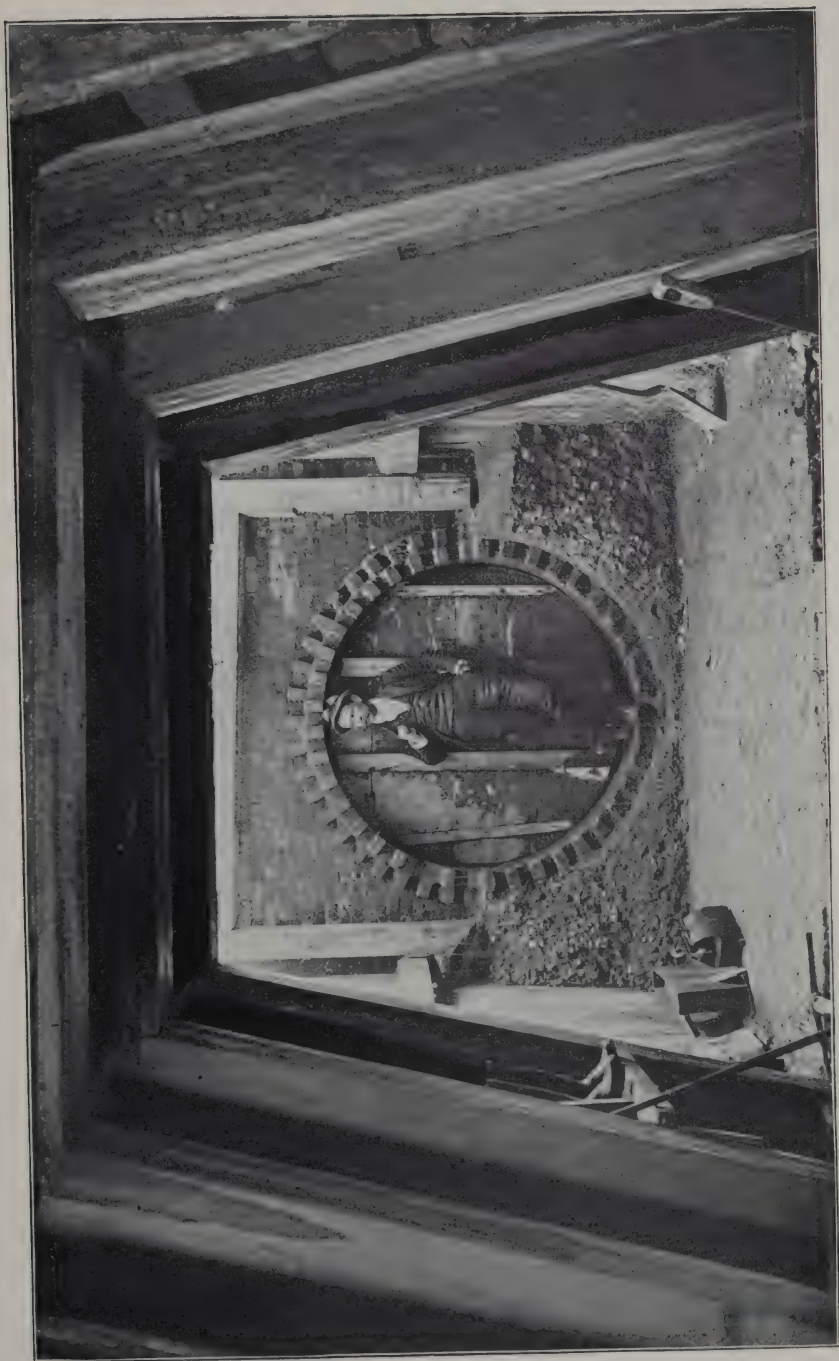
On account of the possibility of greater damage being done by some future storm, it is advisable to extend the sea wall, now building, for a short distance on the opposite side of the gate-house, to allow for filling on all sides of the foundation, except the face, and insure the stability of it in the future.

There are several necessary things about the island that should be done before the work of extending the reservoir is completed.

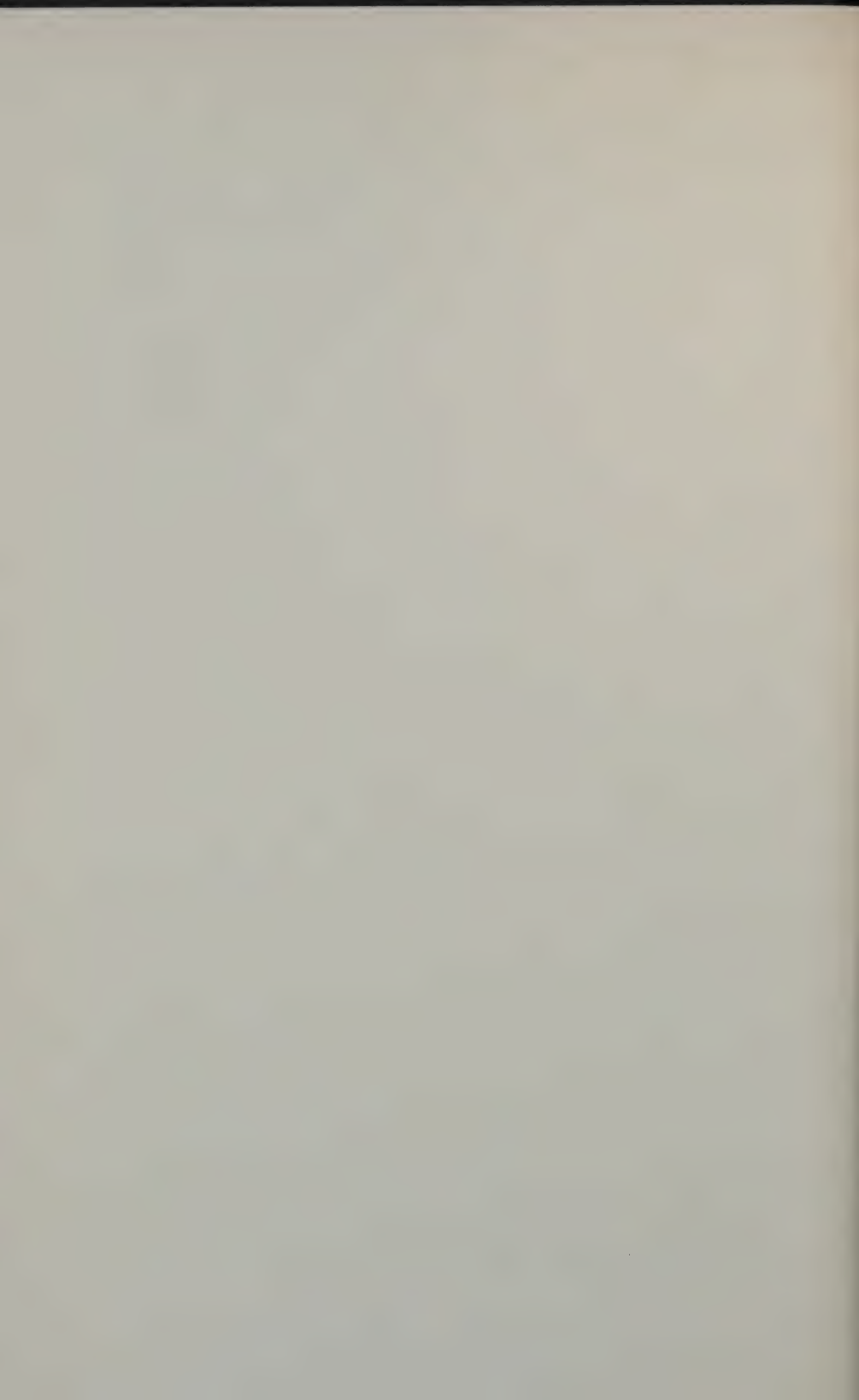
The bluff on the north-easterly side of the island, which is over 100 feet in height, washes and furrows badly each year, carrying large quantities of material into the water. Now, that the sea wall is built on this side of the island, with a fill behind it to an established grade, it will be necessary to grade the bluff to such a slope that a sod can be grown on it to protect it from the action of the rains and frost, or the grade of the filling at its base cannot be maintained, and will always present an unsightly appearance.

A portion of the rip-rap around the island should be relaid as the action of the ice, together with the storms, has moved it so much in places that the ballast beneath it is liable to be washed, and endanger the embankment in which the outfall sewer is built.

The wharf at the island should be extended about forty-five feet, and a channel dredged from it to deep water. The department boat cannot land at the wharf if the water is below half-tide. A run should also be built alongside the wharf, so the small boat can be launched under any conditions of weather. The old boat and house for same were carried away by the storm of November 27, 1898.



STONY BROOK — OAKLAND GARDEN FORK OF THE CANTERBURY BRANCH, SHOWING TUNNEL UNDER THE N. Y. & N. E. R.R.



The automatic tide gauge should be set up at the wharf, so that a continuous and correct record of the height of the tide can be preserved. Aside from the need of it in connection with the works, its usefulness is demonstrated by the repeated requests for such information by the different city departments and others.

A registering gauge should also be placed at the east end of the tunnel to obtain data in regard to the waves that occur there, so that the same may be determined if possible.

The lack of facilities for keeping the outfall sewer clean has long been felt, and I would recommend laying a six-inch water pipe from the gate-house to the connection chamber, with hydrants on it, so that salt water may be used for the purpose.

The old stable, which should have been replaced long ago, cannot be used with economy any longer. Aside from its tumble-down condition, it will not properly accommodate the horses, and there is no chance to get the wagons under cover. A new stable should be built, with proper accommodations and in keeping with the other buildings on the island.

During the summer season, the island is becoming quite a favorite place for people to visit in carriages and on bicycles, not only to see the work, but to get the sea breezes and the fine view of the harbor that may be had from the top of the hill. If the proposed boulevard in Quincy and Squantum becomes a fact, the number will increase, and a driveway around the island and to the top of the hill, with the grounds about the reservoir graded in proper shape, would greatly add to the appearance of the plant and the pleasure of the public.

I think it advisable at this time to consider the necessity of increasing the capacity of the reservoirs beyond the limits of the present contracts, in the near future. If the proposed design for a high level sewer is adopted, and constructed by the State, it will be several years before it will be in operation, and the increase in the amount of sewage received before these works are completed may necessitate storage capacity equal to the capacity of the tunnel.

STONY BROOK.

During the past year, extensive studies have been made of what is known as the Stony brook drainage area. The district has been thoroughly surveyed, and a complete system of drainage for this area designed. This is the largest drainage area in the city of Boston, and should be completed as soon as possible.

FINANCIAL STATEMENT.

Sewer assessments have been made by this division for the year ending January 31, 1899, in accordance with chapter 402 of the Acts of 1892, and amendments thereto, to the amount of \$147,335.37, and the bills have been deposited for collection with the City Collector.

Bills for sewer assessments, amounting to \$759.87, have also been deposited for collection, representing those estates assessed

under chapter 456 of the Acts of 1889, and amendments thereto, which have been connected with the public sewers during the year; making the total amount of assessments deposited for collection, \$148,095.24.

There remain on the books of this division, at 5 per cent. interest, \$24,548.37, representing the assessments under the Acts of 1889, and amendments thereto, for those estates which have not been connected with the sewer for which they were assessed, and bills for which will be deposited for collection as the connections are made. This sum represents 18.5 per cent. of the total assessments made under those Acts. Entrance fees to the amount of \$3,350.06 have been collected from estates upon which no sewer assessment was ever paid, in accordance with chapter 38, section 10, of the Revised Ordinances.

Three thousand and fifty-eight permits have been issued to licensed drain-layers to make connections with the public sewers, and the work done under these permits has been inspected, and a record of the same made on the plans of this division, in accordance with the provisions of chapter 38, section 6, of the Revised Ordinances.

The following tables and statements will show the amount of money expended and work done during the year:

Financial Statement.

APPROPRIATIONS.	Balances on hand February 1, 1898.	Appropriations and income added during the year.	Total Credits.	Expenditures during the year.	Balances on hand January 31, 1899.
Street Department, Sewer Division.....	.....	* \$337,376 27	\$337,376 27	\$337,376 27	
Sewerage Works	\$35,170 00	1,500,000 00	1,535,170 00	1,490,743 50	\$44,426 50
Stony Brook Improvement.....	141,108 10	.....	141,108 10	94,434 76	46,673 34
Dam, from Maverick to Prescott street, East Boston..	3,000 00	.....	3,000 00	.....	3,000 00
Laying-Out and Construction of Highways (Sewer Construction).....	.....	21 97	21 97	21 97	
Blue Hill and other avenues (Sewer Construction).....	.....	15 00	15 00	15 00	
Back Bay Fens Sewage.....	.....	25,000 00	25,000 00	25,000 00	
Totals.....	\$179,278 10	\$1,862,413 24	\$2,041,691 34	\$1,947,591 50	\$94,099 84

* Provided for by income from annual charges.

In addition to the above there was expended for sewer work necessitated by the construction of South Union Station, \$41,588.39, making a total of \$1,989,179.89.

OBJECTS OF EXPENDITURE.

STREET DEPARTMENT, SEWER DIVISION.

Improved Sewerage Maintenance.

Pumping-station, inside . . .	\$53,582 69	
Pumping-station, outside . . .	11,283 70	
Engines and boilers . . .	1,792 29	
Main and intercepting sewers . .	16,562 63	
Moon Island . . .	12,602 86	
Towboat . . .	\$9,392 83	
Less paid by Sanitary Division .	6,775 29	
		2,617 54
		\$98,441 71

Pumping Station, Forest-avenue Section, Dorchester.

Maintenance	6,397 55
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Stony Brook.

Maintenance	11,325 50
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Miscellaneous Maintenance Charges.

Office expenses, Administration, Permit and Record Offices, in- cluding salaries . . .	\$66,709 91	
Office expenses, Engineering Divi- sion, not included elsewhere . .	537 72	
Current expenses of yards and lockers	29,138 67	
Current expenses of stables, in- cluding cost of horses, vehicles, harnesses, etc.	\$37,689 38	
Less amount earned by department teams	12,569 71	
		25,119 67
Repairing catch-basins	4,860 10	
Repairing sewers	5,528 75	
Cleaning and flushing sewers . .	7,208 33	
Cleaning catch-basins	32,063 65	
Repairing streets	260 01	
Repairing and cleaning culverts and surface drains, not included in the Stony brook system . . .	1,218 01	
Examining condition of sewers and catch-basins	7,364 69	
Work for departments and others .	611 46	
House connections	4,730 93	
Damages and claims	351 60	
Holidays	7,471 75	
Travelling and incidental expenses	3,926 23	
Repairing department buildings, stables and yards	4,494 67	
General repairs	814 41	
Hardware, tools and blacksmithing	3,728 18	
Rubber goods	1,755 47	
Increase in stock	12,417 30	
		221,211 51
Total maintenance		
		\$337,376 27

STONY BROOK IMPROVEMENT.

Salaries	\$8,063 40
Water furnished Boston Belting Company	52,533 51
Section 5	202 01
Section 6	112 95
Section 7	2,141 96
Connections at gate-house, Cedar and New Heath streets	1,446 24
Connections at Centre and Heath streets	7,475 55
Connection in private and city land at railroad	17,083 77
Fore-bay and gate-house connections	701 92
Boylston-avenue bridge	3,167 24
Miscellaneous	1,506 21
Total	<u>\$94,434 76</u>

BACK BAY FENS, SEWAGE.

Dredging, Perkins, White & Co.	\$23,689 01
Inspection and engineering	1,310 99
	<u>\$25,000 00</u>

LAYING-OUT AND CONSTRUCTION OF HIGHWAYS.

Ellet street (Quimby & Ferguson)	<u>\$21 97</u>
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BLUE HILL AND OTHER AVENUES.

Commonwealth-avenue outlet at Lake street (E. McHale & Co.)	<u>\$15 00</u>
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SOUTH UNION STATION.

Federal street	\$7,865 50
* Kneeland street, Section 2	5,460 16
Mt. Washington avenue	20,388 44
Summer street	6,492 18
Holidays	1,382 11
Total	<u>\$41,588 39</u>

SEWERAGE WORKS.

Miscellaneous Construction Charges.

Office expenses, Administration and Permit offices, including salaries	\$14,250 63
Office expenses, Engineering Division, including salaries	107,139 98
Water used in sewer construction	5,196 18
Holidays on sewer construction	33,497 20
Work for departments and others	1,772 30
Hardware, tools and blacksmithing	8,807 15
Balances on old construction accounts	483 04
Damages and claims	7,710 72
Carried forward,	<u>\$178,857 20</u>

* Kneeland street, Section 2, was finished out of Sewerage Works appropriation; the total cost for the year was \$9,802.19, of which \$4,342.03 was paid out of Sewerage Works.

<i>Brought forward,</i>	\$178,857 20	
Rubber goods	1,907 55	
Dredging Roxbury canal	3,325 00	
Cleaning sewers	2,321 15	
Faneuil Hall Market. (Extension of house connections)	808 60	
Connection of old and new conduits, Stony brook	4,469 92	
New manholes	284 87	
Preliminary advertising on sewer construction not yet begun	198 00	
Sundries, incidentals and travelling expenses	7,419 16	
		\$190,591 45

Improved Sewer Construction.

Pumping-station, outside, new coal run	\$2,999 31	
Pumping-station, inside, electric plant	5,005 06	
Pumping-station, inside, engine-house floor	821 48	
Pumping-engines	55,751 96	
Air-pumps	4,789 14	
Moon Island reservoir	106,484 44	
Moon Island sea wall	50,291 13	
Moon Island, engineering expenses (including salaries)	5,118 53	
Main and intercepting sewers, stock	4,782 33	
Extension of bullseye at Squantum, connection for city of Quincy	1,060 42	
		237,103 80

Sewer and Catch-basin Construction.

As per tables on pages 184 to 227.

	Sewers.	Catch-basins.	
South Boston	\$85,247 32	\$577 90	
East Boston	32,652 54	330 26	
Charlestown	31,772 11	2,129 56	
Brighton	94,900 85	4,768 17	
West Roxbury	137,686 00	1,170 98	
Dorchester	385,563 42	5,171 25	
Roxbury	157,756 19	7,544 91	
City	102,325 95	5,436 18	
	\$1,027,904 38	\$27,129 21	\$1,055,033 59
			\$1,491,728 84
Less net earnings of department engines and boilers			985 34
			\$1,490,743 50

RECAPITULATION.

Street Department, Sewer Division	\$337,376 27
Stony brook improvement	94,434 76
Laying-out and construction of highways	21 97
Blue Hill and other avenues	15 00
Back Bay Fens, sewage	25,000 00
South Union station	41,588 39
Sewerage works	1,490,743 50
Total expenditures by the division for fiscal year	\$1,989,179 89

Summary of Sewer Construction for the Twelve Months ending January 31, 1899.

DISTRICT.	Built by the City, by Contract or Day Labor.	Built by Private Parties.	Total length built during the 12 months ending Jan. 31, 1899.
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
City Proper.....	8,530.54	—	8,530.54
East Boston.....	1,839.04	298.39	2,137.43
Charlestown.....	1,882.38	162.00	2,044.38
South Boston.....	7,667.84	—	7,667.84
Roxbury.....	34,603.50	4,014.45	38,617.95
West Roxbury.....	26,602.64	1,309.22	27,911.86
Dorchester.....	93,085.61	3,541.93	96,627.54
Brighton.....	18,928.13	—	18,928.13
Total.....	203,139.68	9,325.99	212,465.67

Catch-basins built, February 1, 1898, to January 31, 1899.

	Day Labor.	Contract.	City Engineer.	Private Parties.	Total.
City Proper.....	27	37	23	1	88
Roxbury.....	30	130	—	10	170
Dorchester.....	75	183	—	—	258
West Roxbury.....	10	23	—	2	35
Brighton.....	3	60	—	—	63
Charlestown.....	4	12	—	26	42
East Boston.....	3	—	—	—	3
South Boston.....	4	8	—	—	12
Totals.....	156	453	23	39	671

1,061,761 linear feet sewers flushed.

808 cubic yards material removed from sewers.

6,061 catch-basins cleaned; 19,735 cubic yards removed.

Schedule of Sewers built to Date in the City of Boston, February 1, 1899.

DISTRICT.	Total length built during the 12 months ending Jan. 31, 1899.	Length rebuilt and aban- doned during the 12 months ending Jan. 31, 1899.	Additional length for 12 months ending Jan. 31, 1899.	
	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Miles.</i>
City Proper.....	8,295.04	2,591.28	5,703.76	1.08
East Boston.....	2,137.43	—	2,137.43	0.40
Charlestown.....	2,044.38	493.62	1,550.76	0.29
South Boston.....	7,667.84	3,950.29	3,717.55	0.70
Roxbury.....	38,617.95	2,029.40	36,588.55	6.93
West Roxbury.....	37,911.86	—	37,911.86	7.18
Dorchester.....	96,627.54	—	96,627.54	18.30
Brighton.....	18,928.13	525.34	18,402.79	3.49
Totals.....	212,230.17	9,589.93	202,640.24	38.37
Length built previous to January 31, 1898.....				450.83
Total.....				489.20
Length of intercepting sewer.....				24.12
Total.....				513.32



CALLENDER STREET, DORCHESTER, ROCK CUT.



MAIN DRAINAGE STATION.

The following is a record of sludge received in and removed from deposit sewers for twelve months ending January 31, 1899 :

1898.	RECEIVED.	1898.	REMOVED.
February	418 cubic yards.	February	425 cubic yards.
March.....	538 " "	March.....	680 " "
April.....	520 " "	April.....	680 " "
May.....	620 " "	May.....	595 " "
June.....	640 " "	June.....	765 " "
July.....	725 " "	July.....	765 " "
August.....	980 " "	August.....	1,105 " "
September.....	875 " "	September.....	935 " "
October.....	615 " "	October.....	595 " "
November.....	524 " "	November.....	510 " "
December.....	720 " "	December.....	765 " "
1899.		1899.	
January.....	820 " "	January.....	850 " "
	7,995 cubic yards.		8,670 cubic yards.

PROPERTY IN CHARGE OF THE SEWER DIVISION.

Sewer yard, with buildings, at 678 Albany street, South End.

Sewer yard, with building, on North Grove street, West End.

Sewer yard, on Gibson street, Dorchester, with buildings.

This is Gibson School-fund land. The buildings were erected by the Sewer Department.

Sewer yard, on Columbus avenue, Roxbury.

Sewer yard, with buildings, on Rutherford avenue, Charlestown.

Sewer yard, with buildings, corner Paris and Marion streets, East Boston.

Sewer yard, with buildings, on Massachusetts avenue, near Albany street, South End.

Sewer yard, with buildings, on Western avenue, Brighton.

Sewer yard, with buildings, on Revere street, West End.

Sewer yard, with buildings, H and Ninth streets, South Boston.

Sewer yard, with buildings, Child and South streets, West Roxbury.

Land and buildings at pumping-station, Old Harbor Point, with roadway (Mt. Vernon street).

Land, buildings and reservoirs at Moon Island and Squantum.

Summary of Sewer Construction, for Five Years, Previous to February 1, 1899.

	1894.	1895.	1896.	1897.	1898.
	Feet.	Feet.	Feet.	Feet.	Feet.
Built by the city, by contract or by day labor	90,802.77	139,200.09	116,008.25	134,324.93	203,139.68
Built by private parties...	24,877.05	36,287.35	37,825.92	38,969.14	9,325.99
Total number of feet built,	115,679.82	175,487.44	153,834.17	173,294.70	212,465.67

South Boston.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
B st.	Dorchester ave. and Broadway	553.49	5 ft. × 6 ft. 6 in., brick . }	Day labor (rebuilding),	\$16,148 04
Bullock st.	C st. and D st.	292.10	3 ft. × 3 ft. 2 in., brick . }	Contract	1,677 64
Dorr st.	Dorchester ave. and Ames st.	599.80	12-in. pipe	Built in 1897	1,151 98
Dexter and Ellery sts.	Dorchester ave. and Boston st.	{ 1,007.87	2 ft. 6 in. × 3 ft., brick.. }	Day labor (rebuilding),	24,876 99
Dorchester ave.	Dorr st. and Dexter st.	{ 1,134.15	3 ft. 6 in. × 3 ft. 8 in. ... }	Built in 1897	1,516 37
Dorchester ave.	B and Dorr sts. ....	.....	5 ft., circular brick	Contract (rebuilding) ..	5,410 10
H st.	Tide-water and E. Eighth st.	{ 21.30	5 ft. × 5 ft. 3 in., brick . }	Day labor	745 29
K st.	Tide-water and Ninth st.	278.70	12-in. pipe	Day labor (rebuilding),	26,374 74
Kemp st.	Tide-water and Washington ave.	175.00	10 ft. 3 × 6 ft. 3 in., brick .	Day labor	854 31
Passageway off A st.	A st. and Fort Point channel, East Seventh st. and East Sixth st.	600.00	12-in. pipe	Contract	316 56
Peters st.	E st. and L-st. bridge	573.10	12-in. pipe	Contract	3,841 42
Summer-st. extension.	F and Dorchester sts.	{ 249.98	12-in. pipe	Built in 1897	57 00
Tudor st.	Tide-water and Sixth st.	{ 409.25	18-in. pipe	Day labor (rebuilding),	2,276 88
Q-st. outlet.		{ 740.49	12-in. pipe		
		{ 220.00	6-in. pipe, house drain ..		
		{ 48.00	30-in. iron pipe		
		{ 14.68	2 ft. 6 in., circular brick. }		
		6,917.91			\$85,247 32

Surface Drains built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

Summer-st. ex- tension.....	E-st. and L-st. bridge.....	{		} Contract.
		540.00	18-in. pipe	
		209.93	10-in. pipe.....	
			7 catch-basins	
		749 93		
Catch-basins built.....				577 90
				\$85,825 22

East Boston.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

Ashley ave. Chelsea st. Brooks st. Curtis st. Bremen st. Bennington street boulevard	Bennington st. and Breed st. Chelsea bridge and Curtis st. Overflow at Bremen st. Chelsea st. and Chaucer st. . Existing sewer and Putnam st.	 570.00 96.00	 3-ft. 6-in. X 3-ft. 8-in., brick, 24-in. pipe.....	Built in 1897..... Day labor	\$172 13 9,206 25 52 37 688 92 44 10
				Construction not yet begun.....	43 00
Eagle sq.....	Connection with Metropoli- tan sewer.....	{ 19.27	{ 18-in. pipe	Day labor	9,330 56
Summer st.	Connection Metropolitan sewer at Jeffries st.....	.....	1 sump manhole..... 1 regulator manhole 1 overflow manhole..... 1 tide-gate manhole.....	Built in 1897.....	596 74

East Boston. — Concluded.
Seners built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Falcon st. Lamson st. Wordsworth st. .	Border st. and Meridian st.. Connection with Metropoli- tan sewer at Maverick st.. Saratoga and Pope sts.	240.35	12-in. pipe.	Day labor Built in 1897 Built in 1897	\$693 38 122 77 1,978 74 4,668 57
Marginal st.		{ 17.00 10.00 13.49			

Charlestown.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

Beach st.....	Connection with Metropolitan sewer.....	103.25	18-in. pipe.....	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	\$3,124 04
Charles River ave. and Warren ave.	Connection with Metropolitan sewer.....	{ 109.46 60.00	15-in. pipe, 12-in. pipe	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole.. 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	2,830 88
Front st.....	Connection with Metropolitan sewer at Union st....	106.82	12-in. pipe	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole.. 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	2,735 34
Front st.....	Connection with Metropolitan sewer at Walford st....	39.14	12-in. pipe	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole.. House sewer..... 1 sump manhole..... 1 tidegate manhole.. Rebuilding..... 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	3,333 57
Roland st.....	Connection with Metropolitan sewer.....	{ 772.54 311.40	12-in. pipe, 12x12-in. wood	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole.. 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	4,662 55
Rutherford ave ...	Outlet and Chapman st.....	331.62	3ft. 9in. circular, brick..	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole.. 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	8,078 84
Water st.....	Connection with Metropolitan sewer at Gray st.....	25.50	15-in. pipe	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole.. 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	4,813 42
Water st.....	Connection with Metropolitan sewer at Wapping st..	22.65	15-in. pipe	{ 1 sump manhole..... 1 regulator manhole.. 1 overflow manhole.. 1 tidegate manhole..}	2,193 47
				1 tidegate manhole..	\$31,772 11
<i>Sewers built between February 1, 1898, and February 1, 1899, by Private Parties.</i>					
(Gray-st Outlet.... Catch-basins built.....)	.....	162.00	48-in., iron pipe.....	Rebuilding.	2,129 56
					\$33,901 67

Brighton.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Allston st.....	Commonwealth ave. and Warren st.....	282.10	12-in. pipe.....	Contract	\$1,776 74
Cambridge st....	Charles River and Seattle st..	1,006.06	30-in. X 36-in., brick.....	Day labor	13,686 77
Cambridge st....	Seattle and N. Harvard sts..	.....	.....	Built in 1897.....	1,571 21
Chiswick road...	Strathmore road and Selkirk road	263.85	12-in. pipe.....	Contract	1,445 69
Commonwealth ave.,	Sidlaw and Strathmore roads .....	.....	.....	.....	109 22
Cypress road	Murdock st. and Dustin st..	195.15	12-in. pipe.....	Day labor	236 74
Empire st	N. Harvard st. and Sorrento st.	399.65	12-in. pipe.....	Day labor	450 49
Hano st.....	Everett st. and Cambridge st.	493.74	12-in. pipe.....	Day labor; rebuilding ..	2,399 50
Hardwick st.....	Bigelow st. and Dunboy st..	784.56	12-in. pipe.....	Day labor	1,890 77
Harriet st. and private land ...	Faneuil st. and Parson st....	1,172.80	12-in. pipe.....	Contract	3,037 50
Kilsyth road.....	Colliston road and 75 ft. west	74.81	12-in. pipe.....	Contract	160 93
Kilsyth road.....	Lanark road and Selkirk road,	373.93	12-in. pipe.....	Contract	2,853 62
Kilsyth road and private land ...	Colliston road and Sutherland road.....	350.00	12-in. pipe.....	Day labor	708 30
Kinross road	Sutherland road and Commonwealth ave	545.33	10-in. pipe.....	Contract	2,765 99

Lanark road.....	Sutherland road and Kinross road	476.17	12-in. pipe.....	Contract	2,811 39
Lanark road.....	Englewood ave. and Kilsyth road	229.60	12-in. pipe.....	Contract	1,107 71
Leicester st.....	Bennett st. and Surrey st....	324.87	12-in. pipe.....	Contract	1,529 20
N. Harvard st....	Cambridge st. and Empire st..	202.00	12-in. pipe.....	Day labor	585 24
Selkirk road.....	Sutherland road and Chiswick road	74.21	10-in. pipe.....	Contract	1,413 37
Selkirk road.....	Sutherland road and Kilsyth road	415.52	10-in. pipe.....	Contract	2,248 30
Sparhawk st.	Murdock st. and Cambridge st	159.90	12-in. pipe.....	Contract	296 10
Strathmore road .	Commonwealth ave. and Chestnut Hill ave.....	664.78	12-in. pipe.....	Contract	5,669 57
Sutherland road .	Chestnut Hill ave. and Englewood ave.....	600.30	12-in. pipe.....	Day labor	3,370 05
Warren st.	Cambridge st. and 250 ft. easterly	251.81	18-in. pipe.....	Contract	1,739 83
Webster st.	Off Cambridge st.....	.....	.....	Built in 1897	91 58
Washington st....	Nantasket ave. and Commonwealth ave	100.79	15-in. pipe.....	Day labor	5,576 82
		664.79	12-in. pipe.....		
<i>Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892, or Special Acts referring thereto.</i>					
Chester st.	Brighton ave. and Commonwealth ave.....	20.91 31.60 603.24 287.76	10-in. pipe, C. B. drain... 12-in. pipe, rebuilt	Day labor	1,941 81
			12-in. pipe.....		
			6-in. pipe, house drain. 2 catch-basins		

Brighton. — *Concluded.**Sewers built by the City in streets laid out under Chapter 323, Acts of 1891, etc. — Concluded.*

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Chiswick road and outlet in Com- monwealth ave.	Chestnut Hill ave. and Engle- wood ave.....	{ 1,511.72 179.31 388.60 494.15 383.10 645.58 }	{ 10-in. pipe, house sewer. 10-in. pipe, C. B. drain.. 12-in. pipe, C. B. drain.. 15-in. pipe, C. B. drain.. 18-in. pipe, C. B. drain.. 6-in. pipe, house drain.. 11 catch-basins	Contract	\$6,422 99
Commonwealth ave.....	Outlet at Lake st. ....	.....	.....	Built in 1897	177 06
North Harvard st.	Charles River and Western ave.....	{ 507.00 702.32 }	{ 10-in. pipe, C. B. drain.. 6-in. pipe, house drain.. 26 catch-basins	Contract	3,198 20
Orkney road	Strathmore road and Suther- land road	{ 247.58 105.68 }	{ 10-in. pipe, C. B. drain.. 6-in. pipe, house drain.. 4 catch-basins	Contract	921 00
Telford st.	Western ave. and Charles River Reservation	{ 31.26 171.36 }	{ 10-in. pipe, C. B. drain.. 6-in. pipe, house drain.. 1 catch-basin	Contract	336 20
<i>Surface drains built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.</i>					
Culvert, Common- wealth ave.....	100 ft. west of Brighton ave. and 650 ft. east of Malvern st.....	{ 596.00 77.99 }	{ 6-ft. 6-in. X 7-ft., brick.. 6-ft. X 6-ft., brick..... }	Day labor	14,000 79

Kilsyth road and private land ... Salt Creek Brook in private land. Private land..... Strathmore road. Sutherland road brook, Sutherland road, and Commonwealth ave.....	Colliston road and Sutherland road.....	30.00	30-in. pipe.....	Day labor	{ Cost shown in house sewer table. 4,732 82 159 13 3,286 57
	Commonwealth ave. and B. & A. R.R.....	324.25	6-ft. × 6-ft., brick.....	Day labor	
	Commonwealth ave. and Chiswick road .....	.....	.....	Built in 1897.....	
	Englewood ave. and Commonwealth ave.....	{ 98.48 733.52 }	{ 3-ft., circular brick..... 30-in. pipe	Day labor	
	Outlet in private land and westerly side of Commonwealth ave., near Glendon ave.....	50.00	30-in. pipe	Day labor	
Sewers rebuilt between February 1, 1898, and February 1, 1899.					
Chester st.	Brighton ave. and Commonwealth ave.	31.60	12-in. pipe.		4,768 17
Hano st.	Everett st. and Cambridge st., Catch-basins built	493.74	12-in. pipe.		
					\$94,900 85
					\$99,669 02

West Roxbury.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Anson st. and private land.....	Spalding st. and South st....	584.63	12-in. pipe.	Day labor	\$622 84
Argyle and Marion sts. and private land...	Brookside ave. and Germania st.				
Beech st.....	Newburg st. and summit of hill	1,096.36	12-in. pipe.	Contract	1,299 92
Calder st.	Blue Hill ave. and Canterbury st.....	240.86	12-in. pipe.	Day labor	356 92
Catherine st.....	Florence st. and Bourne st..	500.00	10-in. pipe.....	Day labor	915 61
Corey st.....	Existing sewer and 75 feet northerly.....	66.05	6-in. pipe, house drain..	Day labor	1,517 63
		999.59	12-in. pipe.....		
Harrison st.....	Florence st. and end of street,	75.50	12-in. pipe.....	Day labor	230 48
Jones st.....	Walter st. and Fairview st..	574.02	12-in. pipe.....	Contract	544 77
Keyes st.....	Washington st. and N.Y., } N.H. & H. R.R.....	58.00	6-in. pipe, house drain..	Day labor	467 89
		198.00	12-in. pipe.....	Day labor; built in connection with Goldsmith brook..	Cost shown under smith brook.
		439.77	12-in. pipe.....		
Park st.....	Centre st. and Montview st.,				
Percy st.....	Anson st. and St. Mark st....	1,164.74	12-in. pipe.....	Contract	1,320 51
Perkins st.....	Jamaicaway and Day st....	37.00	6-in. pipe, house drain..	Day labor	211 47
Private land at Parental School, Private land and Rosemary st....		238.41	12-in. pipe.....	Day labor	5,249 05
		438.93	12-in. pipe.....		
		529.97	12-in. pipe.....	Day labor.....	2,505 99
	Spalding st. and South st....	699.90	12-in. pipe.....	Day labor.....	1,585 67

Proctor st, outlet in Selwyn and Morrison sts., and Private land	Arundel st. and Fairview st.	465.22 493.05 915.45	18-in. pipe..... 15-in. pipe..... 12-in. pipe.....	Day labor.....	12,095 29
St. Mark st.....	Percy st. and South st.....	359.73	12-in. pipe.....	Day labor.....	740 68
Sedgewick st....	Existing sewer and Elm st....	150.27	12-in. pipe.....	Contract.....	312 57
Shenwood st....	Garden st. and Ashland st....	1,035.13	12-in. pipe.....	Contract.....	1,472 94
South st.....	Congreve st. and 380 ft. westerly	190.00	12-in. pipe.....	Day labor.....	864 65
South and Con- greve sts.,....	Fletcher st. and Centre st....	315.00	12-in. pipe.....	Day labor.....	1,320 23
South and Farqu- har sts.,....	New South st. and Centre st.	1,828.21	12-in. pipe.....	Day labor.....	7,227 20
South and Fletch- er sts.,....	New South st. and Centre st.,	1,594.34	12-in. pipe.....	Day labor.....	5,829 81
Substitute way for South st....	Brandon st. and South st....	720.75 637.74	15-in. pipe..... 12-in. pipe.....	Day labor.....	5,984 68
Temple and Pel- ham sts., and outlet in.....	.....	10,300.00	12-in. pipe.....	Contract.....	19,095 16
Lagrange st.. Glenham st.. Harwood st.. Lasell st.....	.....				
Private land Keith st.....	.....				
Alden st.....	.....				
Mt. Vernon st. Dent st.....	.....				
Ivory st.....	.....				
Wachusett st....	Walk Hill st. and Varney st.	200.00	12-in. pipe.....	Contract.....	188 96
Walter st.....	Ashfield st. and Weld st....	409.54	12-in. pipe.....	Day labor.....	1,600 77
Walter st.....	Outlet near Proctor st. and Mendum st.....	102.66	12-in. pipe.....	Day labor.....	610 13

West Roxbury. — Concluded.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or by Day Labor. — Concluded.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Weld and Corey sts.	Metropolitan sewer and Vermont st.	365.00	12-in. pipe.....	Day labor.....	\$1,426 69
Westbourne st. .	Beech st. and Cornell st.	390.15	12-in. pipe.....	Contract.....	640 98
Woodside ave....	Washington st. and Forest Hills st.....	.....	.....	Built in 1897.....	227 10
<i>Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892 or Special Acts referring thereto.</i>					
Angell st.....	Blue Hill ave and Canterbury st.	20.00	10-in. pipe C. B. drain ..	Contract	806 85
Belmore terrace..	Boylston st. and Boylston ter.	255.00	6-in. pipe, house drain..	Built in 1897.....	421 07
		1,976.79	2 catch-basins		
		259.72	12-in. pipe, house sewer..		
		399.46	24-in. pipe, C. B. drain ..		
		278.04	15-in. pipe, C. B. drain ..		
		340.18	12-in. pipe, C. B. drain ..		
		1,007.16	10-in. pipe, C. B. drain ..		
			6-in. pipe, house drain..		
			10 catch basins		
			4 drop inlets		
		764.22	12-in. pipe, C. B. drain ..		
		55.35	10-in. pipe, C. B. drain ..		
		510.12	6-in. pipe, house drain..		
			5 catch-basins		
Woodlawn st	Hyde Park ave. and Forest Hills Cemetery			Contract	1,556 44

Sewers built between February 1, 1898, and February 1, 1899, by Private Parties.

Henshaw terrace. Montebello road. Whittemore st...	Off Corey st..... Washington st. and Walnut ave. Montview st. and Crest st....	132.20 847.22 329.80	10-in. pipe. 12-in. pipe. 12-in. pipe.		
<i>Surface Drains built between February 1, 1898, and February 1, 1899, by the City, either by Contract or by Day Labor.</i>					
Franklin Park brook in Calder st. and private land.....	Blue Hill ave. and Canter- bury st.	175.00	4 ft., circular brick.....	Day labor.....	1,547 93 { Built from main te- nance. 11 78
Centre st.....	Bellevue st. and N.Y., N.H. & H. R.R.	77.61	18-in. pipe.....	Day labor.....	
Hyde Park ave...	Stony brook and Weld Hill st.....	.....	.....	Built in 1897.....	
Keyes st. and pri- vate land.....	Washington st. and South st.	536.31	8 ft. 6 in. × 6 ft. 9 in., brick.....	{ Goldsmith's brook conduit; day labor; 12-in. pipe built in connection with this. See sewers built by the city by contract or day labor.....	50,646 43
Goldsmith brook.	.....	1,050.89	8 ft. 6 in. × 6 ft., brick..	.....	
Spalding st.....	South st. and N.Y., N.H. & H. R.R.	{ 39.04 444.78	18-in. pipe.....	Day labor.....	653 21
Keyes and Lee...	.....	.....	15-in. pipe.....	Just begun.	434 26
Catch-basins built.....				.....	\$137,686 00 1,170 98
				.....	\$138,856 98

Dorchester.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or by Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-1899.
Built in	Between				
Barry st.	Barrington st. and Quincy st.	400.48	12-in. pipe	Contract; some rock..	\$1,154 32
Bowdoin st.	Barrington st. and Quincy st.	400.51	12-in. pipe	Contract; all rock	1,402 60
Ditson st.	Charles st. and Josephine st.	247.69	12-in. pipe	Contract	279 60
Dorchester ave. . .	Dorchesterway and Mt. Vernon st.	225.30	12-in. pipe	Contract	966 16
Elmo st.	Main sewer, westerly toward Erie st. ....	.....	.....	Built in 1897	250 59
Eaton sq.	Draper ct. and Adams st. . .	211.76	12-in. pipe	Contract	366 00
Elmo and Greenwood st. ....	.....	.....	.....	Built in 1897	1,004 39
Harvard ave.	Trescott st. and Washington st.	1,000.00	12-in. pipe	Contract	765 45
Leedsville st.	Washington st. and Harvard st. ....	.....	.....	Built in 1897	73 38
Magnolia sq.	Dorchester ave. and Adams st.	267.27	12-in. pipe	Day labor; some rock.	787 78
Magnolia st.	Magnolia st. and the end of Magnolia sq. and point 200 feet south.	165.00	12-in. pipe	Day labor; some rock.	1,117 52
Nottingham st. . .	Existing sewer and Bullard st.	145.00	12-in. pipe	Contract	215 18

Private way.....	Romsey st. and end.....	140.41	12-in. pipe.....	Contract.....	28 90
Private land and Endleigh st....	.....	.....	.....	Just begun.....	337 49
Raven st.....	Crescent ave. and Harbor View st.....	449.65	12-in. pipe.....	Contract.....	443 03
Roland Park.....	Summer st. and point 210 feet east.....	209.64	12-in. pipe.....	Contract.....	224 83
Sawyer ave.....	Downer and Cushing aves.. Wesley ave. and Evandale terrace.....	.....	.....	Built in 1897.....	72 43
Savin Hill ave. ..	Blue Hill ave. and 282 feet easterly.....	910.00	15-in. pipe.....	Contract; much rock..	4,377 31
Stanwood st.	Faxon st. and Harvard st.. Normandy st. and Blue Hill ave.....	282.15 707.69	12-in. pipe.....	Contract; much rock..	1,099 48
Trescott st.....	Normandy st. and Columbia road.....	.....	.....	Contract.....	1,441 15
Stanwood st.....	.....	.....	.....	Built in 1897.....	1,363 13
Stanwood st.....	.....	.....	.....	Built in 1897.....	2,347 22
South Dorchester.					
<i>Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or by Day Labor.</i>					
Adams st.....	Hillsdale and Medway sts. ..	623.15	15-in. pipe.....	} Contract; much rock..	6,671 78
Private land.....	Milton Branch R.R. and Adams st.....	3,125.00	12-in. pipe.....		
Richmond st.....	Adams st. and Swans ct.....	670.00	6-in. pipe, house drain ..	} Built in 1897.....	277 35
Birch st.....	Chapman and Lauriat aves.. Neponset ave. and Bowman st.	549.27	12-in. pipe.....		
Blackwell st.	Blackwell st. and private land,	78.00	6-in. pipe, house drain ..	} Contract.....	762 79
Bowman st. ....	.....	.....	.....		

South Dorchester.—*Continued.*

Sewers built between February 1, 1898, and February 1, 1899, by the City, by Contract or by Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Centre st.	Dorchester ave. and Remington st.	560.75	12-in. pipe.	Contract.	} 3,049 94
Centre st.	Remington st. and Centre ave.	240.80	12-in. pipe.	Contract; much rock..	
Centre st.	Elm lawn and summit, early.	296.27	12-in. pipe.	Contract; very much rock.	
Coffey st.	Existing sewer and Newhall st. ....	.....	.....	Built in 1897.	1,877 83
Chapman ave.	Pump well and Lyons st. ....	.....	.....	.....	8 00
Chapman ave.	Lyons and Tucker sts.	363.63	12-in. pipe.	Contract; very much rock.	488 84
Evans st.	Capen and Stanton sts. ....	.....	.....	Built in 1897.	1,876 42
Evelyn st.	Norfolk st. and Blue Hill ave. ....	.....	.....	Contract; very much rock.	404 59
Norfolk st.	Elizabeth and Evelyn sts. ...	1,553.57	12-in. pipe. ....	.....	3,328 29
Evans st.	Nelson st. and summit. ....	.....	.....	Built in 1897.	369 71
Fairview st.	Neponset and Frost aves.	367.96	12-in. pipe.	Day labor.	670 44
Evans st.	Morton st. and summit. ....	.....	.....	.....	524 64
Ferndale st.	Southern ave. and existing sewer.	148.80	12-in. pipe.	Contract.	319 34
Frost ave.	Fairview st. and summit.	265.29	12-in. pipe.	Day labor.	476 26
Fuller st.	Passageway and Morton st. ...	35.77	12-in. pipe.	Contract; much rock..	698 19

Hopkins st.	Evans and Corbett sts.	180.00	12-in. pipe.....	Contract; very much rock.....	1,298 19
Huntoon st.	Butler and Medway sts.	435.00	12-in. pipe.....	Contract; much rock..	737 51
Lauriat st.	Chapman and Lauriat aves.	330.41	12-in. pipe.....	Contract; some rock..	415 14
Lyons st.	Chapman and Lauriat aves.	137.25	12-in. pipe.....	Day labor	361 76
Malvern st.	Adams and Milton sts.	453.40	12-in. pipe.....	Contract	744 18
Mascot ave.	Mountain ave. and Norfolk st.	311.00	6-in. pipe, house drain..		
Jones ave.	Mascot ave. and private land,	187.19	12-in. pipe.....	Day labor	1,368 16
Private land	Jones and Lauriat aves.				
Mascot ave.	Jones and Mountain aves.	249.50	12-in. pipe.....	Contract; some rock..	402 71
Massasoit ave.	Talbot and New England aves.	557.75	12-in. pipe.....	Contract	1,117 75
Melbourne st.	Joseph and Centre sts.	204.90	12-in. pipe.....	Contract; some rock..	272 86
Middleton ave.	Norfolk st. and private land.			Contract and day	
Private land	Middleton ave. and Willow- wood st.	797.66	12-in. pipe.....	labor; considerable rock.....	1,340 02
Morton st.	Lower Mills main sewer and Oak Ridge st.	550.00	15-in. pipe.....	Contract; some rock..	1,937 23
Oak Ridge st.	Morton st. and Codman st.	600.00	12-in. pipe.....		
Mountain ave.	Lauriat and Ballou aves.				
Dumas st.	Mascot and Willowwood sts.	759.87	12-in. pipe.....	Contract; very much rock.....	3,317 73
Nelson st.	Selden and Norfolk sts.	174.15	12-in. pipe.....	Contract; much rock..	1,910 92
Newhall pl.	Newhall ave. and lot line			Built in 1897	78 08
Norfolk st.	Evelyn and Walk Hill sts.	264.88	18-in. pipe.....	Contract; some rock..	2,547 78
Walk Hill st.	Norfolk st. and Blue Hill ave.	1,032.35	12-in. pipe.....	Contract; considerable rock.....	702 63
Norfolk st.	Ballou ave. and Mascot st.	342.30	12-in. pipe.....	Built in 1897	230 49
Oak terrace.	Dorchester ave. and Swans ct.			Contract; much rock..	3,893 71
Richmond st.	Adams and Richmond sts.	1,016.07	12-in. pipe.....		
Butler st.		529.78	12-in. pipe.....	Built in 1897	204 02
Shelton st. and private land ...					

South Dorchester. — *Continued.*

Sewers built between February 1, 1898, and February 1, 1899, by the City, by Contract or by Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Rosemont st., outlet in..... Mill st.....	Intercepting sewer and Adams st..... Mill and Centre sts..... Adams st. and private land..	3,110.00	3 ft. 4 in. X 5 ft., brick..		
Adams st..... Centre st.....		800.00 149.79 12.00	12-in. pipe..... 4 ft. diameter, overflow. 4 ft. to 5 ft. X 5 ft. 2 in., reducer		
Private land.....	Centre and King sts.....	29.98 6.00	5 ft. X 5 ft. 2 in., overflow. 5 ft. X 5 ft. 2 in. to 6 ft. X 5 ft. 8 in., reducer..	Day labor; much rock.	\$72,613 09
King st. and private land.....	King st. and Rosemont road.	17.10	6 ft. X 5 ft. 8 in., brick..		
Rosemont road ..	Private land and Shawmut pk.	8.59 12.00	Chamber		
River, Fremont and Norfolk sts.			4 ft. diameter, tide-gate chamber		
Walk Hill st	Blue Hill ave. and 300 ft. north of Tileston ave.....	1,025.45 510.30	12-in. pipe..... 6-in. pipe, house drain..	Built in 1897	236 09 349 21
Wentworth st...	Existing sewer and Torrey st., Wentworth and Learned sts.....	300.98 468.65 531.35	15-in. pipe..... 15-in. pipe..... 12-in. pipe.....	Contract; some rock..	2,510 65 1,036 38
Torrey st.....	Learned and Washington sts.			Contract; some rock..	

White terrace....	Lauriat and Jones aves.....	298.30	12-in. pipe.....	Day labor	452 79
Whitfield st.....	Northern and Wheatland aves	273.97	12-in. pipe.....	Contract....	277 60
Washington st....	Miller's lane and Grant pl...	.....	.....	Built in 1897...	205 65
Washington st....	Main Sewer to Sanford st....	.....	.....	Built in 1897.....	115 89
Wrentham st....	Dorchester ave. and existing sewer .....	..	.....	Built in 1897.....	5 00

Sewers built between February 1, 1898, and February 1, 1899, by the City, under Chapter 323 of the Acts of 1891, as amended by Chapter 418, of the Acts of 1892, or Special Acts referring thereto.

Bernard st.....	Talbot ave. and Harvard st..	.....	.....	Built in 1897	833 62
Callender st.....	Don and Lyons sts.	200.00	10-ft., circ. brick conduit.	Contract; much rock.	4,841 18
Burt st.....	Ashmont and Washington sts.	.....	.....	Built in 1897.....	387 43
Bloomfield st....	Geneva ave. and Greenbrier st.	295.32	12-in. pipe, sewer.....	Built in 1897.....	29 69
		182.00	6-in. pipe, house drain,		
		13.00	12-in. pipe, C. B. drain.		
		28.00	10-in. pipe, C. B. drain.		
		.....	1 catch-basin		
		.....	1 drop inlet.....		
		0.98	15-in. pipe, sewer		
		191.35	12-in. pipe, sewer		
		22.55	6-in. pipe, house drain,		
		52.80	15-in. pipe, C. B. drain..		
		3.86	12-in. pipe, C. B. drain.		
		20.54	10-in. pipe, C. B. drain.		
		.....	1 drop inlet.....		
		155.30	12-in. pipe, sewer		
		156.00	6-in. pipe, house drain,		
Carlos st.....	Chapman and Lauriat aves..	.....	.....	Contract; much rock.	1,025 26
					
Elizabeth st. and outlet in Norfolk st....	Norfolk and Astoria sts.....	.....	.....	Contract; very much rock.....	2,287 84
	Ballou ave. and Elizabeth st.	.....	.....		
Morton st.....	Culvert and Norfolk st.....	.....	.....		
					
Fairmount st....	Capen and Morton sts.....	.....	.....	Contract.....	1,180 42

South Dorchester. — Concluded.

Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892, or special Acts referring thereto.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Greenbrier st ...	Bloomfield and Park sts....	1,153.00 832.00 80.00 349.95 53.96 65.15 200.00 28.00 21.82 202.00 288.92 520.43 97.68 220.80 314.00 188.00 258.04 28.25	 12-in. pipe, sewer. 6-in. pipe, house drain, 18-in. pipe, C. B. drain.. 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 4 catch-basins..... 1 drop-inlet..... 24-in. pipe, culvert..... 6-in. pipe, house drain.. 18-in. pipe, sewer..... 6-in. pipe, house drain, 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 7 catch-basins..... 3 drop-inlets..... 12-in. pipe, sewer..... 6-in. pipe, house drain, 20-in. pipe, C. B. drain.. 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 3 catch-basins..... 1 drop-inlet.....	Built in 1897..... Contract; considerable rock..... Contract..... Contract..... Contract; some rock..	\$10 56 4,233 78 470 73 1,313 61 1,361 89
Idaho st. and outlet.....	River and Manchester sts....				
Leroy st.....	Ditson st. and Geneva ave...				
Lonsdale st.....	Dorchester ave. and Adams st.				
Mellen st.....	Ocean and Montague sts.....				

Spencer st.	Wheatland and Talbot aves..	215.31	12-in. pipe, sewer.....	Contract.....	961 08
		310.50	6-in. pipe, house drain,		
		20.66	18-in. pipe, C. B. drain..		
		71.20	15-in. pipe, C. B. drain..		
		282.17	12-in. pipe, C. B. drain..		
		72.90	10-in. pipe, C. B. drain..		
		.....	4 catch-basins.....		
		.....	2 drop-inlets.....		
					
		2,030.96	15-in. pipe, sewer.....		
Tonawanda st....		2,951.61	12-in. pipe, sewer.....	Built in 1897.....	687 10
West Selden st. and outlet.....	Morton and Manchester sts..	964.00	6-in. pipe, house drain,		
				Contract; much rock..	11,584 80

Dorchester.

Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1898, as amended by Chapter 418 of the Acts of 1899, or Special Acts referring thereto.

Waterlow st. and outlet.....	Harvard st. and Harvard st..	529.42 247.07 433.60 73.90 353.00 31.83 425.44 498.84 199.31 12-in. pipe 15-in. pipe, C. B. drain.. 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 6-in. pipe, house drain, 9 catch-basins 18-in. pipe, C. B. drain.. 15-in. pipe, C. B. drain.. 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 7 catch-basins 2 drop inlets.....	2,125 28 Contract
Rosseter st. and outlet.....	Bullard st. and Bowdoin st..	..... .....	2,496 18 Contract; some rock..

Dorchester. — *Continued.*

Sewers built between February 1, 1893, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1893, or Special Acts referring thereto.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-1899.
Built in	Between				
Spencer st.....	Park st. and Athelwold st...	156.00 27.00	6-in. pipe, house drain.. 10-in. pipe, C. B. drain.. 2 catch-basins	{ Contract	\$289 41
Stanley st.....	Quincy st. and Bellevue st..	119.25 52.00 195.00	12-in. pipe, sewer		
			10-in. pipe, C. B. drain.. 6-in. pipe, house drain.. 3 catch-basins		
Thane st.....	Park st. and Athelwold st...	32.00 243.00	10-in. pipe, C. B. drain.. 6-in. pipe, C. B. drain.. 2 catch-basins	{ Contract	737 40
			12-in. pipe		
			6-in. pipe, house drain.. 10-in. pipe, C. B. drain.. 2 catch-basins		
Maryland st.....	Savin Hill ave. and Bay st..	149.29 255.00 15.40	10-in. pipe, C. B. drain.. 2 catch-basins	{ Contract	303 65
			10-in. pipe, C. B. drain ..		
			1 catch-basin		
Merlin st.....	Park st. and Athelwold st...	15.00 70.00 550.00	12-in. pipe	{ Contract	435 08
			6-in. pipe, house drain.. 18-in. pipe, C. B. drain ..		
			15-in. pipe, C. B. drain ..		
Nightingale st. .	Talbot ave. and Bernard st...	303.35 261.30 299.10	12-in. pipe, C. B. drain ..	{ Contract	103 95
			10-in. pipe, C. B. drain ..		
			7 catch-basins		
			4 drop inlets		2,254 73

Oakley st. ....		.....	12-in. pipe	131 65
Peverell st.		436.70	6-in. pipe, house drain..	
		442.00	10-in. pipe, C. B. drain ..	1,310 42
		65.00	4 catch-basins	
Fowler st.		503.00	6-in. pipe, house drain ..	
		42.00	10-in. pipe, C. B. drain..	2,456 56
			4 catch-basins	
		496.52	15-in. pipe, sewer	
		617.63	12-in. pipe, sewer	
		343.85	18-in. pipe, C. B. drain..	
Hamilton st. and outlet in Homes ave.	{	679.84	15-in. pipe, C. B. drain..	
	{	315.50	12-in. pipe, C. B. drain..	
		20.80	10-in. pipe, C. B. drain..	5,630 71
		783.00	6-in. pipe, house drain..	
			7 catch-basins	
		70.00	10-in. pipe, sewer	
		616.00	6-in. pipe, house drain ..	
Erie st. and Columbia road..		814.70	30-in. brick, C. B. drain..	
			2 catch-basins	3,298 82
			1 drop inlet	
		169.00	6-in. pipe, house drain..	
		45.10	10-in. pipe, C. B. drain ..	
			3 catch-basins	
Dorchester ave. and Adams st.		4,776.13	12-in. pipe	379 00
		600.00	6-in. pipe, house drain..	
		87.80	30-in. pipe, C. B. drain..	
		64.56	24-in. pipe, C. B. drain..	
		197.40	18-in. pipe, C. B. drain..	
		550.11	15-in. pipe, C. B. drain..	
Blue Hill ave. and Stanwood st.		1,747.80	12-in. pipe, C. B. drain..	
		747.37	10-in. pipe, C. B. drain..	
			27 catch-basins	
			9 drop-inlets	
Columbia road, Sect. 1				
Leadsville st.				
Hewins st.				

Cost shown
on next
page.

Cost shown
on next
page.

Dorchester. — *Continued.*

Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892, or Special Acts referring thereto.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Columbia road, Sect. 2	Stanwood st. and N.E. R.R.	2,411.73 256.00 1,354.21 141.91 207.27	12-in. pipe..... 6-in. pipe, house drain... 18-in. pipe, C. B. drain.. 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 7 catch-basins	Contract and day labor; very much rock	\$57,299 95
Columbia road, part of Sect. 2 .	Near N.E. R.R. crossing	106.00 351.80 198.87	15-in. pipe..... 18-in. pipe, C. B. drain.. 12-in. pipe..... 1 catch-basin		
Columbia road, Sect. 3	Quincy st. and Dudley st....	3,260.00 503.00 1,162.00 510.00 673.00 1,240.00	12-in. pipe., C. B. drain.. 18-in. pipe, C. B. drain.. 15-in. pipe, C. B. drain.. 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 6-in. pipe, house drain.. 30 catch-basins		
			7 drop-inlets.....		

Columbia road, Sect. 4	Dudley st. to Edward Everett sq.	1,047.47 128.00 267.47	12-in. pipe..... 6-in. pipe, house drain.. 10-in. pipe, C. B. drain.. 7 catch-basins	Contract	101 29
Devon st.	Columbia road and Blue Hill ave.	495.00 35.00 9.00	1 drop-inlet..... 6-in. pipe, house drain.. 12-in. pipe, C. B. drain.. 10-in. pipe, C. B. drain.. 1 catch-basin	Contract; some rock.	
<i>Sewers built between February 1, 1898, and February 1, 1899, by Private Parties.</i>					
Claybourne st.	Bowdoin st. and 422 ft. south- erly	422.49	12-in. pipe.		
Dakota st.	Greenbrier and Washington sts.....	370.00	12-in. pipe.		
Draper st.	Homes ave. and Bowdoin sts.....	622.27	12-in. pipe.		
Mt. Ida road.....	Bowdoin st. and Potosi st....	796.30	12-in. pipe.		
Potosi st.	Percival ave. and Mt. Ida road.....	287.90	12-in. pipe.		
Wilder road.....	Columbia road and Nor- mandy st.	465.45	12-in. pipe.		
South Dorchester.					
<i>Sewers built between February 1, 1898, and February 1, 1899, by Private Parties.</i>					
Alpha road.....	Waldeck and proposed sts....	389.20	12-in. pipe	Contract (private).	
Santuit st.....	Rosemont st. and Welles ave.	121.32	12-in. pipe	Contract (private).	

Dorchester. — Concluded.

Surface Drains built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Oakland Garden . Fork, Canterbury Branch, Stony Brook.....		459.00	4 ft. drain, brick.....	Day labor.....	\$17,160 79
Park st. and Elmo st.....	.....	1,364.60	4 ft. 6 in. drain, brick....		
Oakland Garden Fork of Can- terbury Branch of Stony Brook,	Bernard st. and Talbot ave..	{ 8.00 280.00	7 ft. × 5 ft. 8 in. to 5 ft. } 6 in., reducer.....	Contract.....	365 31
Canterbury branch of Stony brook, Park st.....	Harvard and Callender sts.... Spencer st. and Kilton st....		5 ft. 6 in., circular brick. }		
Tenean Creek....	Park st. and Charles st.....	935.00	Open ditch	Day labor	101,961 08
		375.00	24 in. pipe, C. B. drain..	Day labor	
Tenean Creek or Smelt Brook, the South Branch.....	Main brook and Gibson st...	110.00	8 ft. × 6 ft. 6 in., brick..	Day labor	
		810.70	8 ft. × 6 ft. 6 in., brick....	Contract.....	
		268.44	5 ft. 3 in. × 5 ft. 3 in., brick.....	Contract.....	
		128.18	4 ft. diameter, brick	Contract.....	
		127.65	15 in. pipe	Contract (rebuilding),	
		203.41	6 ft. 6 in. × 6 ft. 6 in., brick.....	Day labor.....	

Tenean Creek or Smelt Brook...	Point nearly opposite Elm st., and point on Park st. between Dorchester and Geneva aves.....	{ 335.53 262.62 948.33 }	14 ft. X 12 ft., brick..... 10 ft. 6 in. X 9 ft., brick.. 8 ft. X 6 ft. 6 in., brick..	Day labor. Some rock	147 50
South Dorchester.					
<i>Surface Drains built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.</i>					
Bernard st.....	Harvard st. and Talbot ave...	46.00	18-in. pipe	Contract	147 50
Carruth st.....	Weyanoke and Shenandoah sts.	101.50	15-in. pipe	Contract	687 23
Shenandoah st....	Carruth and Wessex sts.	307.92	12-in. pipe	Contract	687 23
Mattapan brook in Selden st.....	Nelson st. and passageway ..	29.32	10-in. pipe	Contract	687 23
Passageway	Selden and Capen sts.....	12.00	2 catch-basins	Contract	687 23
Capen st.....	Passageway and Norfolk st. .	1,250.00	3 drop-inlets	Contract	687 23
Private land.....	Passageway and Fairmount st.	560.00	5 ft. X 3 ft. 9 in. to 3 ft. 6 in. reducer	Contract	687 23
Rosemont st., Out- let in	Centre ct. and private land..	1,096.08	3 ft. 6 in., circular brick..	Contract	687 23
Centre st.	Centre and King sts.....	9.00	24-in. pipe	Contract	687 23
Private land.....	King st. and private land...	67.00	15-in. pipe	Contract	687 23
King st. and private land ...	King st. and Rosemont road, Private land and Shawmut pk.	66.00	12-in. pipe	Contract	687 23
Rosemont road...			10-in. pipe	Contract	687 23
			11 catch-basins	Contract	687 23
			2 drop-inlets.....	Contract	687 23
		1,855.00	6 ft. X 6 ft., brick	Day labor; much rock.	Cost shown in house- sewer table.

South Dorchester.—*Concluded.*

Surface Drains built between February 1, 1898, and February 1, 1899, by the City, either by Contract or by Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Wessex, Weyanoke and Bushnell sts. ....	.....	.....	.....	Built in 1897	\$919 20
Dorchester.					
<i>Surface Drains built between February 1, 1898, and February 1, 1899, by Private Parties.</i>					
Private land.	Wilder st. and Geneva ave. . .	67.00	24-in. pipe, C. B. drain ..	.....	\$385,563 42
Catch-basins built.....	.....	.....	.....	.....	5,171 25
					\$390,734 67

Roxbury.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract, or by Day Labor.

Adams pl.	Williams st. and Washington st.	459.83	12-in. pipe.....	Day labor.....	\$1,208 44
Benton st.	Columbus ave. and Tremont st.	299.50	18-in. pipe.....	Day labor.....	834 41
Beech Glen st.	Highland st. and Fort ave. . .	335.00	12-in. pipe	Contract (all rock)	4,508 43

Bray st.	Columbus ave. and Washing- ton st.	{ 238.10 234.00 32.50 }	12-in. pipe.	Contract	502 78
Fellows st.	Hunneban st. and Webber st.		6-in. pipe, house drain..	Day labor.	922 03
Fairweather st. .	Harrison ave. and Reed st. .		10-in. pipe, C. B. drain..	Day labor.	439 53
Harrison ave.	Massachusetts ave. and Eus- tis st.		2 catch-basins.	Day labor (rebuilding) .	9,421 48
Haskins st.	Ruggles st. and Vernon st. .		12-in. pipe.	Day labor (rebuilding) .	4,959 64
Highland st.	Existing Sewer and Dorr st. .		12-in. pipe.	Contract.	253 41
Hollander st.	Harold st. and Crawford st. .		1 ft. 8-in. X 2 ft. 6-in., brick	Day labor (rebuilding) }	Built from maintenance
Linden Park st. .	Lamont st. and 210 feet west- erly.	205.14	12-in. pipe.	Day labor.	503 08
Ellingwood st. .	Lawn st. and end.	410.83	30 in. X 36 in., brick sewer.	Built in 1897	402 74
Hemenway st. .	Norway and Boylston sts. .			Rebuilding.	5,245 71
Mozart st.	Armstrong and Centre sts. .			Built in 1897	221 62
Riverway and Brookline ave. .	Kenwood road and Muddy river.	{ 295.11 397.20 193.20 12.00 }	24-in. pipe, sewer.	Outlet for Francis st.; built by contract.	10,662 77
Parker Hill ave. .	Parker and Calumet sts.		18-in. pipe, sewer.	Built in 1897	31 50
Smith st.	Phillips and St. Alphonsus sts.	566.06	24-in. pipe, iron pipe, C. B. drain.	Built by contract.	1,220 13
Kenwood road. .	Vila st. and Huntington ave. .	750.39	15-in. pipe, sewer.	Built by contract.	1,210 54
Ruggles st.	Rogers ave. and Halleck st., (Ruggles and Hal- leck sts.)	440.00	12-in. pipe, sewer. ....	.....	3,067 49
Walpole st.	Tremont st. and Columbus av.		18-in. pipe, sewer.	Built in 1897	12 25

Roxbury. — *Continued.*

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-1899.
Built in	Between				
Hutchins ave.	Day and Lawn sts.	264.00	12-in., pipe, sewer	Built by contract	\$1,849 96
Wabeno st.	Waumbeck and Wyoming sts. ....	.....	.....	Built in 1897	42 38
Passageway	Hemenway st. and Massachusetts ave.	408.06	15-in., pipe, sewer	Built by day labor	1,694 35
Walnut ave.	Pickering ave. and Rockland st. ....	.....	.....	Built in 1897	21 53
Newark st.	Cedar st. and end of street..	50.00	18-in. pipe	Contract	402 90
Notre Dame st. and passageway,	.....	424.23	12-in. pipe .....	.....	.....
Private land	Columbus ave. and Washington st.	779.75	4 ft. 3 in., circular brick, sewer	Day labor. (Partly rebuilding)	12,479 42
Seaver st.	Lamont st. and Prentiss pl., Humboldt and Elm Hill avenues	100.02	12-in. pipe	Day labor	151 10
Sonoma st.	Maple st. and Elm Hill ave., Existing sewer and Walnut ave.	1,002.65	12-in. pipe	Contract; rock	2,008 88
Townsend st. ....	.....	428.87	12-in. pipe	Contract	785 53
Willow Park	Shawmut ave. and end of park	90.00	12-in. pipe	Day labor; rock	510 63
	.....	75.00	10-in. pipe	Day labor. Maintenance. (Rebuilding),	Built from maintenance.

Walnut ave.	Harrishoff and Townsend sts.	219.00	12-in. pipe	Contract; some rock...	484 22
Waumbek st.	Harold st. and Humboldt ave.	467.47	12-in. pipe	Contract	816 93
<i>Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892, or Special Acts referring thereto.</i>					
BOULEVARDS:					
Columbus ave., Sections 4, 5 and 6	Roxbury crossing and Old Heath st.	920.00 608.00 330.00	8-in. pipe, house drain, 6-in. pipe, house drain, 10-in. pipe, catch-basin drain..... 17 catch-basins .....	.....	4,283 18
		404.20	2 drop-inlets. 4 ft. X 4 ft., brick and stone, catch-basin drain.....	.....	
Columbus ave., Sect. 7	Old Heath and Ritchie sts...	63.60	2 ft. 4 in. X 3 ft. 6 in., brick, sewer .....	.....	
		24.40	2 ft. X 3 ft., brick, sewer..	.....	
		321.80	24-in. pipe, sewer .....	.....	
		59.60	12-in. pipe, sewer .....	.....	
		366.00	8-in. pipe, house drain, ..	.....	
Columbus ave., Sect. 7	Old Heath and Ritchie sts..	27.20 254.00	6-in. pipe, house drain, 10-in. pipe, catch-basin drain..... 9 catch-basins	Built by contract	9,576 76
Bryant st.	Huntington ave. and Parker st. ....	.....	.....	Built in 1897	111 10

Roxbury.—*Continued.*

Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892, or Special Acts relating thereto.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Francis st.	Brookline ave. and Hunting-ton ave.	{ 1,022.70 1,351.90 166.03 }	{ 12-in. pipe, sewer..... 6-in. pipe, house-drain, 15-in. pipe, catch-basin drain..... 12-in. pipe, catch-basin drain..... 10-in. pipe, catch-basin drain..... 5 catch-basins..... }	{ Built by contract }	\$6,013 09
Vila st.	Kenwood road and Francis st.	{ 180.00 9.00 }	{ 12-in. pipe, sewer..... 15-in. pipe, catch-basin drain..... 12-in. pipe, catch-basin drain..... 12-in. pipe, sewer..... 24-in. pipe, catch-basin drain..... 15-in. pipe, catch-basin drain..... }	{ Outlet for Francis-st. sewers. Built by contract..... }	
Kenwood road...	Brookline ave. and Vila st.	{ 35.15 }	{ 15-in. pipe, catch-basin drain..... }	{ Built in 1897..... }	
Parker, Turner and Norway sts.	.....	.....	.....	.....	
				Built in 1897.....	305 21

Ruggles st.	Parker st. and Back Bay Fens,	54.80	18-in. pipe, sewer.	Built by contract	620 85
Vancouver st. . .	Huntington ave. and Ruggles st.	48.20	10-in. pipe, catch-basin drain.		
Peterborough st.,	Boylston st. and Audubon road	50.00	4 catch-basins		
			6-in. pipe, house-drain, ...	Built in 1897	814 20
			15-in. pipe, catch-basin drain.		
Peterborough st.,	Audubon road and Audubon road	482.63	12-in. pipe, catch-basin drain.		
		1,170.17	10-in. pipe, catch-basin drain.	Built by contract . . .	3,863 18
		284.20	6-in. pipe, house-drain, ...		
		2,261.79	10 catch-basins		
			10 drop-inlets	Built by day labor. . .	
		833.16	30-in. X 36-in. brick sewer, ...		
		463.60	24-in. pipe, catch-basin drain.		
		324.59	18-in. pipe, catch-basin drain.	Built by contract. . . .	
Ipswich st.	Boylston st. and Charlesgate west	164.15	12-in. pipe, catch-basin drain.		
		583.07	10-in. pipe, catch-basin drain.		
			9 catch-basins		
		755.68	6 drop-inlets		
		48.00	18-in. pipe, sewer		
			12-in. pipe, catch-basin drain.		
		108.67	10-in. pipe, catch-basin drain.	Built by contract	
		40.00	8-in. pipe, house-drain, ...		
		154.00	6-in. pipe, house-drain, ...		
			5 catch-basins		
			1 drop-inlet.		
Ipswich st.	Charlesgate west and Boylston road.				26,038 71

Roxbury. — Continued.

Sewers built between February 1, 1898, and February 1, 1899, by the City in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892, or Special Acts referring thereto.

LOCALITY.		Length in Feet.	Dimensions and Materials.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
St. Stephen st.	Bryant and Jarvis st.	771.55 60.55 27.83 116.50 559.05	2-ft. 6-in. X 3-ft., brick, sewer 18-in. pipe, sewer 12-in. pipe, sewer 10-in. pipe, catch-basin drain 6-in. pipe, house-drain, 10 catch-basins	Built by contract	\$7,990 30
Astor st.	Massachusetts ave. and Hem-enway st.	876.15 63.97 136.83 37.50 953.29	2 ft. 6 in. X 3-ft., brick, sewer 18-in. pipe, sewer 10-in. pipe, catch-basin drain 8-in. pipe, house drain, 6-in. pipe, house drain, 11 catch-basins	Built by contract	6,410 58
Wensley st.	Heath and Bucknam sts.	24.30 350.00 68.00	10-in. pipe, sewer 6-in. pipe, house drain, 10-in. pipe, catch-basin drain 5 catch-basins	Built by contract	1,647 72

Amory st.	Bragdon st. and School st. . .	{ 699.00 11.00 }	{ 6-in. pipe, house drain, 10-in. pipe, C. B. drain . . 2 catch-basins }	Contract	829 12
Bragdon st.	Amory st. and Columbus ave. .	{ 546.00 43.00 }	{ 6-in. pipe, house drain, 10-in. pipe, C. B. drain . . 3 catch-basins }	Contract	633 64
Harold st.	Walnut ave. and Monroe st. . .	{ 345.00 64.00 }	{ 6-in. pipe, house drain, 10-in. pipe, C. B. drain . . 4 catch-basins }	Contract	2,460 64
Shirley st.	Norfolk ave. and Massachu- setts ave.	{ 454.09 125.00 828.00 }	{ 18-in. pipe 10-in. pipe, C. B. drain . . 6-in. pipe, house drain, 7 catch-basins }	Contract	1,959 14
<i>Surface Drains built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.</i>					
Queensbury st. Old Stony Brook Channel	At Kilmarnoch st. Amory st. and Columbus ave. .	89.60 160.00	12-in. pipe, surface drain. 4 ft. x 4 ft., brick	Built by contract. Day labor	252 31 1,694 74
<i>Sewers built between February 1, 1898, and February 1, 1899, by Private Parties.</i>					
McCarthy pl.	Tremont st., southwesterly . .	320.99	12-in. pipe, sewer.		

Roxbury.—*Continued.*
Sewers built between February 1, 1898, and February 1, 1899, by Private Parties.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Brookledge st....	Humboldt and Elm Hill aves.....	1,084.41	12-in. pipe.		
		212.60	12-in. pipe.		
		180.00	6-in. pipe, house drain.		
Copley st.....	Columbus ave. and West Wal- nut pk.....	15.00	12-in. pipe, C. B. drain.		
		25.00	10-in. pipe, C. B. drain.		
		.....	2 catch-basins.		
		238.25	12-in. pipe.		
		192.00	6-in. pipe, house drain.		
Ernst st.....	Bragdon st. and West Wal- nut pk.....	30.00	10-in. pipe, C. B. drain.		
		25.00	12-in. pipe, C. B. drain.		
		.....	2 catch-basins.		
		187.20	12-in. pipe.		
		168.00	6-in. pipe, house drain.		
Miles st....	Bragdon st. and West Wal- nut pk.....	685.00	15-in. pipe.		
		552.00	6-in. pipe, house drain.		
		45.00	10-in. pipe, C. B. drain.		
West Walnut pk.	Amory st. and Columbus ave.	54.00	12-in. pipe, C. B. drain.		
		.....	6 catch-basins.		

Sewers built between February 1, 1898, and February 1, 1899, by the City of Boston, by Contract or Day Labor, under the direction of the Stony Brook Improvement Office.

Connection in private and city land at railroad.	Intersection of Centre st. and Columbus ave.....	52.00	12-in. pipe	{ Rebuilt; contract built from appropriations for Stony Brook Improvement.
West Roxbury low level outlet in Columbus ave.....	Centre st. and Cedar st.....	.....	Built 7 ft. × 10 ft., brick.	{ Converted from old Stony Brook channels.....
Tremont st.....	At Roxbury Crossing.....	.....	Built 7 ft. × 7 ft., brick..	{ Same as above.....
Columbus ave....	At Heath st.....	.....	.....	{ Regulator and tide gate to prevent flooding of Boston Belting Company's property by backing up of Stony Brook Valley sewer.
				\$6,196 31
				1,620 30

Roxbury.—*Concluded.*

Surface Drains built between February 1, 1898, and February 1, 1899, by the City of Boston, by Contract or Day Labor, under the direction of the Stony Brook Improvement Office.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Connection in city land and private land at railroad	Section in Centre st. and private land and portion built by N.Y., N.H. & H. R.R. Co.	60	15 ft. 6 in. × 17 ft., brick.	{ Contract built from Stony Brook appropriation cost shown under that heading.	
Tremont and Linden Park sts...	Roxbury Crossing and Hampshire st.....	729	3 ft. × 7 ft., brick	Made by building division wall through centre of 7 ft., × 7 ft., sewer. See records of West Roxbury low level sewer.	6,959 20
Catch-basins built.....					\$157,756 19
					7,544 91
					\$165,301 10

City Proper.

Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

Atlantic ave.	South Market st. and Commercial Wharf.....	.....	.....	Built in 1897.....	\$157 86
Barton st.	Barton pl. and Milton st....	.....	.....	Built in 1897	218 24
Bothnia and Boylston sts.	Cambria st. and Massachusetts ave.....	.....	.....	Built in 1897	49 53
Passageway	St. Botolph st. and N.Y., N.H. & H. R.R.....	624.12	12-in. pipe, sewer.....	Rebuilding; built from maintenance appropriation	
Dorchester ave....	Summer st. and Mt. Washington ave.	254.24 973.96	15-in. pipe, sewer..... 12-in. pipe, sewer.....	} Contract	3,526 77
West Brookline st.	Washington st. and Shawmut ave.	226.16	12-in. pipe, sewer.....	Contract; rebuilding..	391 84
Canal st., relief sewer:					
In Clinton st. . .	Commercial and Fulton sts...	80.32	5 ft. 6 in. X 5 ft. 9 in., brick sewer.....		
In Fulton st. . .	Clinton and Cross sts.....	274.27	5 ft. 6 in. X 5 ft. 9 in., brick sewer.....		
In Cross st. . . .	Fulton and Hanover sts.	58.47	6 ft. 6 in. X 3 ft. 10 in., brick sewer		
		576.93	5 ft. 6 in. X 5 ft. 9 in., brick sewer		58,064 85
		24.00	reducers (brick)		
		5.00	2 ft. 6 in. X 3 ft., brick sewer		
In Cross st.....	Hanover and Endicott sts....	291.00	4 ft. 9 in. X 5 ft. brick sewer		

City Proper.—*Continued.*
Sewers built between February 1, 1898, and February 1, 1899, by the City, either by Contract or Day Labor.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Charles and Allen sts.....	Poplar and Brighton sts. ....	.....	Back filling	Built by contract Sewer finished in 1897.	3,687 20
Dewey sq.....	.....	.....	District regulator.....	On intercepting sewer, Construction shown under South Union Station, partial cost charged against sewerage works after South Union Station money was spent...	2,875 60
Kneeland st., Sec. 1	Cove and South sts.....	163.50	5 ft. 8 in. X 8 ft. 6 in., brick sewer.....	.....	4,342 03
		24.00	4 ft. X 5 ft., wood sewer	.....	
		6.00	18-in. pipe, sewer.....	.....	
		24.00	Brick reducer.....	.....	
		538.00	4 ft. 6 in. X 6 ft. 9 in., brick sewer.....	.....	22,597 01
South st.....	Kneeland and Harvard sts...		12-in. pipe, sewer.....	.....	
Way st.....	Albany st. and Harrison ave.	360.00	.....	Rebuilt by N.Y., N.H. & H. R.R.	
Tremont st.....	Corning st. and railroad.....	.....	.....	Built in 1897.....	24 20

South Union Station.

Mt. Washington ave. Railroad yard and Kneeland st....	Fort Point Channel and South st.	90.00 210.70	6 ft. 9 in. $\times$ 6 ft. 9 in., brick sewer..... 2 ft. 6 in. $\times$ 3 ft., brick sewer.....	Piles by contract.....	Built from special appro- priation for South Union Station, cost shown on p.
Kneeland st., Sec. 2	Federal to Cove sts.	15.80 8.00 18.33 10.50 217.80 13.70	20-in. circular brick sewer Brick reducer at tide gate, Brick tide gate chamber.. Brick regulator manhole. 3 ft. $\times$ 5 ft., brick sewer, 2 ft. 8 in. $\times$ 4 ft. 6 in., brick sewer.....		
Federal st. and railroad yard..	Near Federal-st. bridge.....	4.00	Brick reducer.....	Intercepting sewer...	Piles by contract.....
Summer st.....	Fort Point Channel and Cove st.....	138.19	5-ft., circular, brick sewer		
Cove st.....	At Summer st.....	61.44	2 ft. 8 in. $\times$ 4 ft., brick sewer.....		

City Proper. — Continued.

Sewers built between February 1, 1898, and February 1, 1899, by the City, in streets laid out under Chapter 323 of the Acts of 1891, as amended by Chapter 418 of the Acts of 1892, or Special Acts referring thereto.

LOCALITY.		Length in feet.	Dimensions and Material.	Remarks.	Expenditure during the fiscal year 1898-99.
Built in	Between				
Public alley, No. 401.....	Irvington and Garrison sts....	27.20	6-in. pipe, house drain .. 2 catch-basins .....	.....	\$419 25
Public alley, No. 402.....	Garrison and W. Newton sts.	.....	1 manhole.....	.....	192 79
Public alley, No. 403.....	W. Newton and Cumberland sts.....	.....	1 catch-basin	Built by contract	204 05
Public alley, No. 404.....	Cumberland st. and Public alley, No. 405.....	22.00	1 manhole.....	.....	346 30
Public alley, No. 405.....	St. Botolph st. and Hunting-ton ave.	22.00	6-in. pipe, house drain .. 2 catch-basins .....	.....	253 57
Belvidere st.....	Dalton and West Newton sts.	219.25 53.52 364.00	1 catch-basin	Built by contract	964 48
Public alley, No. 437.....	Berkeley and Arlington sts. .	.....	12-in. pipe, sewer	Built by contract	286 68
Charlestown st. . .	Haymarket sq. and Causeway st.	996.14	10-in. pipe, C. B. drain.. 6-in. pipe, house drain, 6 catch-basins	Built by contract	3,708 44

Surface Drains built between February 1, 1898, and February 1, 1899, either by Contract or Day Labor.

St. Botolph and Irvington sts...	Harcourt st. and Boston and Providence Railroad			Built in 1897.....	\$15 26
Surface Drains built between February 1, 1898, and February 1, 1899.					
Dorchester ave. extension.....	Summer st. and Mt. Wash- ington ave.....	473.00	15-in. pipe, catch-basin drain	} Built by contract.	
		392.00	12-in. pipe, catch-basin drain.....		
		338.00	10-in. pipe, catch-basin drain		
Summer st. ex- tension.....	Fort Point channel and At- lantic ave.....	.....	12 catch-basins		
		210.00	10-in. pipe, catch-basin drain.....		
		.....	5 catch-basins.....		
Atlantic ave.....	Summer and Kneeland sts...	.....	4 drop-inlets.....		
		115.00	10-in. pipe, catch-basin drain.....		
		.....	4 catch-basins.....		
East st.....	Near Atlantic ave.....	6.00	10-in. pipe, catch-basin drain.....		
		.....	1 catch-basin		
Catch-basins built					\$102,325 95
					5,436 18
					\$107,762 13

Sewers Abandoned or Rebuilt between February 1, 1898, and February 1, 1899.

LOCALITY.		Length in Feet.	Dimensions and Material.	Remarks.
In	Between			
SOUTH BOSTON.				
B st.....	Dorchester ave. and Broadway	{ 553.49 292.10 }	5 ft. X 6 ft. 6 in., brick .. 3 ft. X 3 ft. 2 in., brick...	{ Day labor Day labor }
Dexter and Ellery sts.....	Dorchester ave. and Boston st.....	{ 1,007.87 1,134.15 }	2 ft. 6 in. X 3 ft., brick... 3 ft. 6 in. X 3 ft. 8 in., brick	{ Day labor Day labor }
Dorchester ave...	Dorr and Dexter sts.....	{ 21.30 278.70 }	5-ft., circular brick..... 5 ft. X 5 ft. 3 in., brick...	{ Contract Rebuilt. }
H st.....	Tidewater and East Eighth st.....			
Kemp st.....	Tidewater and Washington ave.....	600.00.	10 ft. 3½ in. X 6 ft. 3 in., brick.....	Day labor
Q st. outlet.....	Tidewater and Sixth st.....	{ 48.00 14.68 }	30-in. iron pipe..... 2 ft. 6 in., circular brick.	{ Day labor Day labor }
ROXBURY.				
Hemenway st....	Norway and Boylston sts....	410.83	18 in. X 24 in., brick, sewer	Rebuilt.
Passageway	Hemenway and Massachusetts ave.....	408.06	10-in. pipe, sewer	Rebuilt.
Harrison ave.....	Massachusetts ave., Eustis st.....	284.95	2 ft. 4 in. X 3 ft. 6 in., brick.....	Day labor.
Haskins st.....	Ruggles and Vernon sts....	425.00	15-in. pipe.....	Day labor.

Hollander st. Notre Dame st. and private land,	Harold and Crawford sts.	150.00	1 ft. 8 in. × 2 ft. 6 in., brick.....	Day labor; maintenance.
Willow park.	Columbus ave. and Washing- ton st.	275.56	4 ft. 3 in. circular brick...	Day labor.
	Shawmut ave. and end of park	75.00	10 in. pipe.....	Day labor; maintenance.
CITY PROPER.				
Cross st.	Hanover and Endicott sts.	145.00	12 in. × 15 in., brick sewer.....	Rebuilt....
Cross st.	Hanover and Endicott sts.	118.00	20-in. bbl. brick sewer ...	Rebuilt....
Cross st.	Hanover and Endicott sts.	300.00	Brick sewer	Rebuilt....
Cross st.	North and Hanover sts.	87.00	20 in. × 33 in. brick sewer.	Rebuilt....
	Fulton and North sts.		2 ft. 9 in. × 3 ft. wood sewer	Rebuilt....
Cross st.	Fulton and North sts.	220.00	3 ft. × 3 ft. wood sewer..	Rebuilt....
Cove st.	At Summer st.	130.00	2 ft. 5 in. × 3 ft. wood sewer	Abandoned.
Fulton st.	Clinton and Cross sts.	140.00	2 ft. 6 in. × 2 ft. 6 in. wood sewer	Rebuilt (Canal st. relief).
Kneeland st.	Federal and South sts.	6.00	18 in. pipe sewer	Abandoned.
Kneeland st.	Federal and South sts.	235.00	4 ft. × 5 ft. wood sewer...	Abandoned.
Passageway.	St. Botolph st. and N.Y., N.H. & H. R.R.	624.12	12 in. pipe sewer	Rebuilt.
Way st.	Albany st. and Harrison ave.	360.00	2 ft. × 2 ft. wood sewer...	Rebuilt.
W. Brookline st.	Washington st. and Shawmut ave.	226.16	2 ft. × 2 ft. brick sewer...	Rebuilt.
Federal st. and Railroad yard..	Near Federal st. bridge	{ 141.50 132.00	3 ft. × 5 ft. brick sewer.. 2 ft. 8 in. × 4 ft. 6 in. brick sewer	Intercepting sewer abandoned.

APPENDIX F.

REPORT OF THE DEPUTY SUPERINTENDENT OF
THE STREET CLEANING DIVISION.

921 TREMONT BUILDING,
BOSTON, February 1, 1899.

Mr. BENJ. W. WELLS,

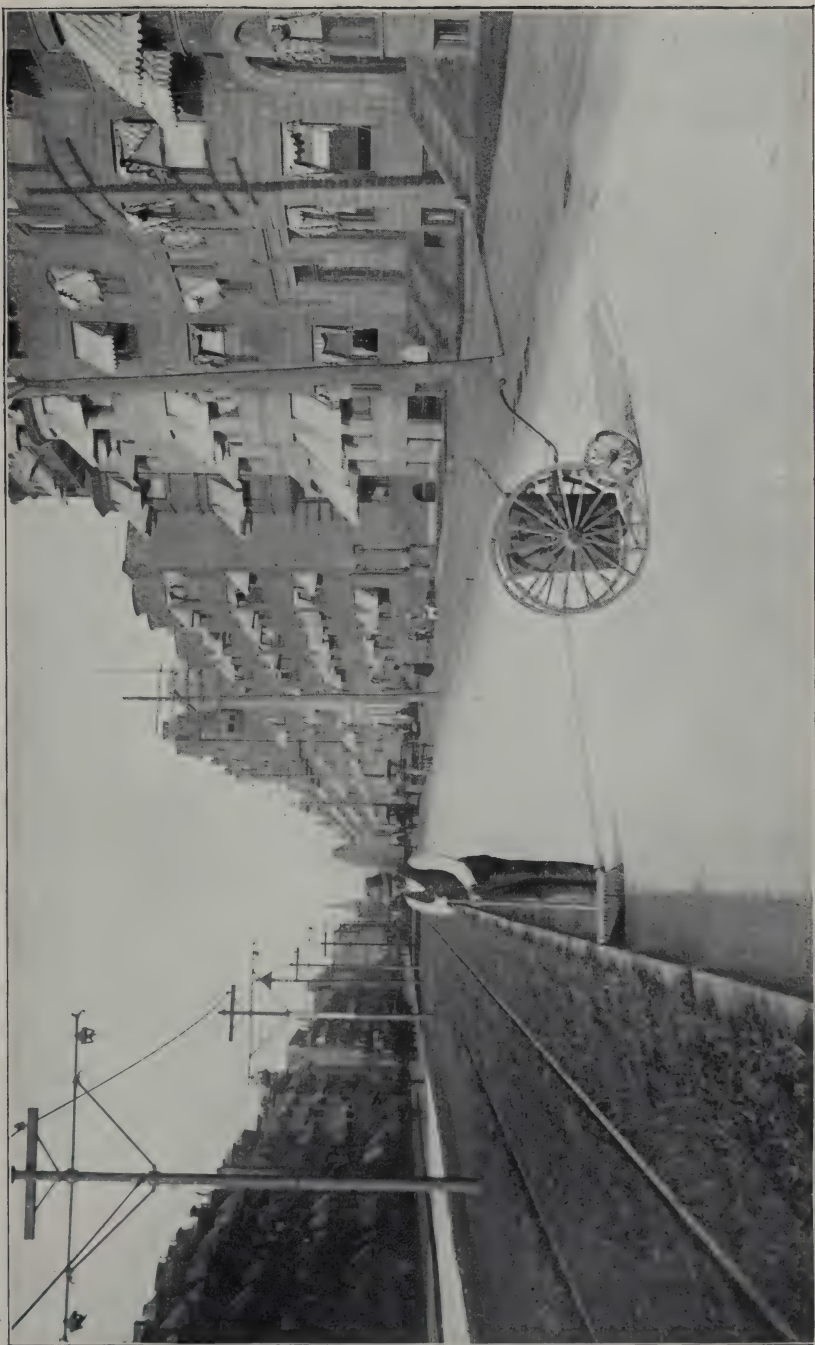
Superintendent of Streets, City Hall, Boston :

SIR, — In submitting the annual report of the Street Cleaning Division of the Street Department for the year ending January 31, 1899, I beg leave to call your attention to some few features of last year's work, which deserve more than a perfunctory notice.

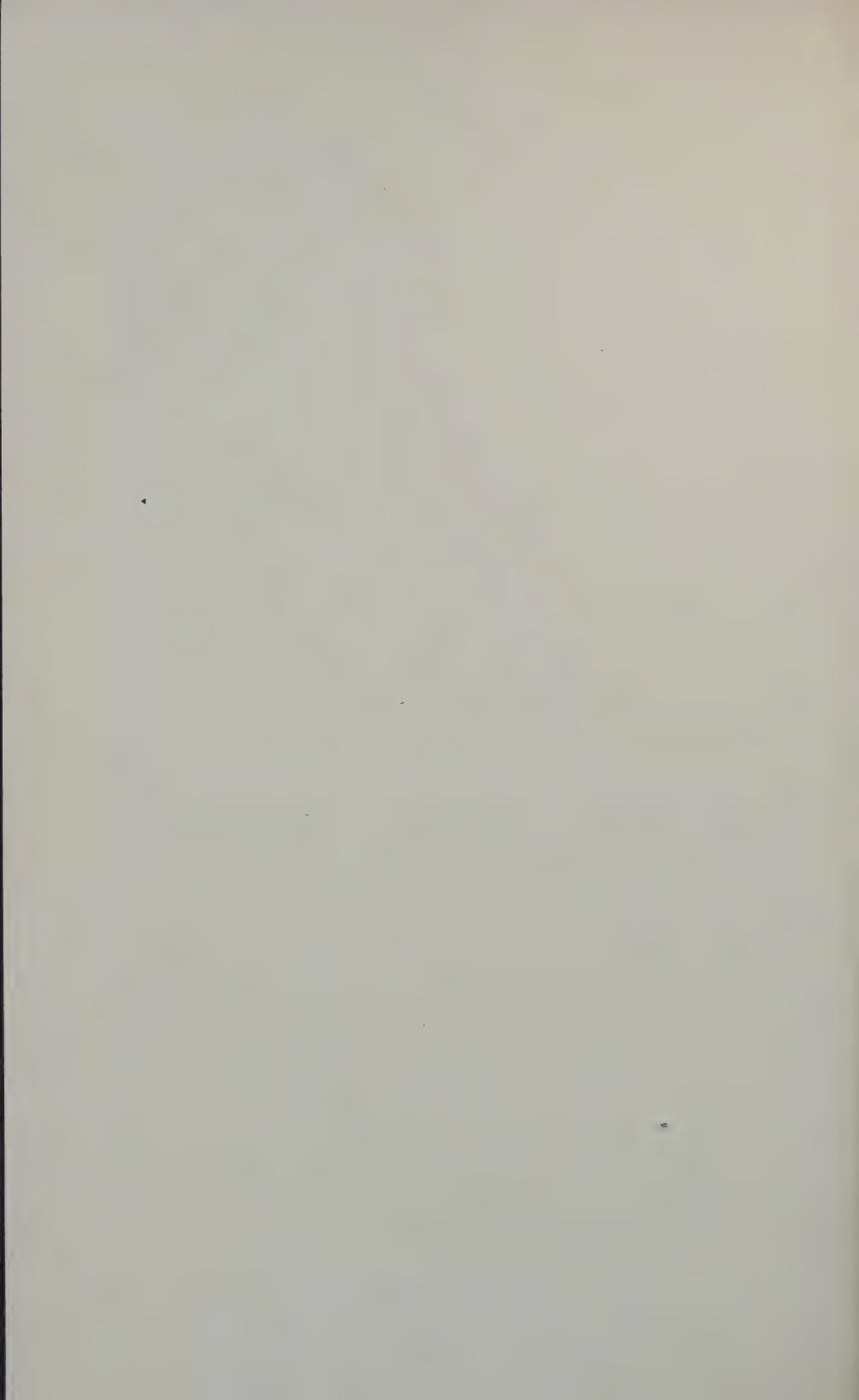
Tabulated statements and even carefully computed totals are not always exhaustively descriptive of work done; a better proof of which cannot be found in this report than in those figures which appear to show the operations of the hand sweeping force in District 10, the West and the North End sections of this city.

Hand sweeping, or what may be called the bag-carrier system, was introduced in this city for the first time about the middle of last September and has been continued with unqualified success up to the present. Its tentative period, if, indeed, it was ever deemed an experiment, has passed; if it was on trial the verdict is in its favor. No figures of cost, nor tables of mileage, can tell its story. The results are clean streets for the first time in that section of the city covered by this force. The streets, which under the old system of machine sweeping were cleaned but three or four times a week, and which it was once declared impossible, even with large forces of men and teams, to keep free from dirt for any length of time, are now being constantly cared for from seven till five o'clock every working day of the year. General, and almost absolute cleanliness, is the result. It is only a question of time and larger appropriations, when hand sweeping will be so extended as to embrace at least the entire business section of the city; and it is simply in recognition of the splendid results of the work of this system that I urgently recommend its extension, and that you ask for more money for this division.

The work of flushing asphalt streets in the Back Bay District was not of sufficient magnitude to warrant an assurance of its success as an economical method of street cleaning in this city; and this is, in a great measure, attributable to the fact that the conditions which make it such in foreign cities, do not exist here. The hydrants, which are a prime factor in this scheme of flushing in continental cities, are so located and constructed as to contribute to the work of the street



PUSH CART PATROL.



cleaners; they are a part of the street cleaning plant; whereas, in our city, they are placed and fashioned for the sole use and purposes of our Fire Department. Under existing conditions, I would not care to recommend flushing on a large scale.

In the matter of recommendations for the future, which I now make agreeably to your request, in addition to that of a large appropriation for the extension of the hand-sweeping system, I respectfully but earnestly remind you of the need of new and more stable room. All our stables are old, some of them dilapidated and none of them in first-class condition. It will cost a few thousand dollars to put them in good repair. Provision should be made towards acquiring new quarters for our South Boston force, as it seems probable that the stables now occupied by us at the corner of Vale and Burnham streets must soon be vacated. It is to be hoped also that the idea of establishing a force in East Boston will be realized. It may be well to mention in connection with this subject, that my stable equipments are as complete as the appropriation would allow. All the street carts have been put in first class condition, and are, for all my purposes, as good as new, — the equal of any lot of carts in any department.

The patrol system force of this division has never had suitable accommodations. Their old station at the foot of Oliver street was unfit, unsanitary and not safe. At the old Public Library building, where I succeeded in locating them towards the close of the year, they have large rooms, plenty of light and air and many of the modern improvements.

I do not like to close this annual report until I have paid my tribute of praise to all the men who have helped to make this a prominent year in the history of this division. My assistants in the office have always and quickly responded to every suggestion; the foremen have worked as a unit and in harmony; the humblest laborer has done his duty; and I have no hesitation in declaring that the Street Cleaning Division force is a well organized and disciplined body.

Respectfully submitted,

JOSHUA ATWOOD, 3D,

Deputy Superintendent.

FINANCIAL STATEMENT.

Appropriation, 1898-99	\$315,000 00
Revenue — Boston Elevated Railway Company	63 99
Transfer from Street Department — Central Office	450 44
Transfer from Bridge Division	538 30
Total amount of appropriation	\$316,052 73
Total amount of expenditures	316,052 73

OBJECTS OF EXPENDITURES.

Superintendence.

Salary of Superintendent	\$3,000 00
Office pay-rolls	4,932 37
Stationery	236 94
Printing	747 18
Board of horses	1,168 06
Telephone service	444 05
	\$10,528 60

CLEANING STREETS.

Including Cost of Sweeping, Loading and Removal of Street Dirt.

District	1.	South Boston	\$14,539 24
Districts	2-3.	East Boston and Charlestown	11,739 57
District	7.	Roxbury	15,110 41
District	8.	South End:	
		Day gang	12,609 92
		Night gang	38,259 52
District	9.	Back Bay	5,758 76
District	10.	West End and North End	30,996 72
Total cost of cleaning streets			<u>\$129,014 14</u>

HAND SWEEPING.

District 10, West End and North End.

Bag carriers and push-carts	.	.	.	.	.	.	\$5,646 10
Piling dirt	.	.	.	.	.	.	490 94
Snow work	.	.	.	.	.	.	1,530 51
Teaming and helpers	.	.	.	.	.	.	1,403 91
Dump	.	.	.	.	.	.	176 83
Patrolling	.	.	.	.	.	.	31 55
Miscellaneous work	.	.	.	.	.	.	68 44
Superintendence	.	.	.	.	.	.	608 17
							\$9,956 45

NOTE.—The district covered by the Hand Sweeping Force represents an area of 188,166 square yards of granite and asphalt pavement. At first glance, it would appear that, in the matter of mileage this year's work suffers in comparison with that of former years, but it must be borne in mind that no mileage is set against the work of the Hand Sweeping Force, for the reason that the streets in this district are being cleaned from morning till evening, every street being cleaned many times a day; whereas, those streets in districts covered by the sweeping machine forces are never swept more than once a day.

CLEANING GUTTERS.

Including Cost of Sweeping, Loading and Removal of Street Dirt.

District	1.	South Boston	\$1,865 14
Districts	2-3.	East Boston and Charlestown	3,526 49
District	7.	Roxbury	3,915 59
District	8.	South End:	
		Day gang	2,861 72
		Night gang	
District	9.	Back Bay	3,549 31
District	10.	West End and North End	417 64
Total cost of cleaning gutters			<u>\$16,135 89</u>

Total length of gutters cleaned, 2,106.47 miles.

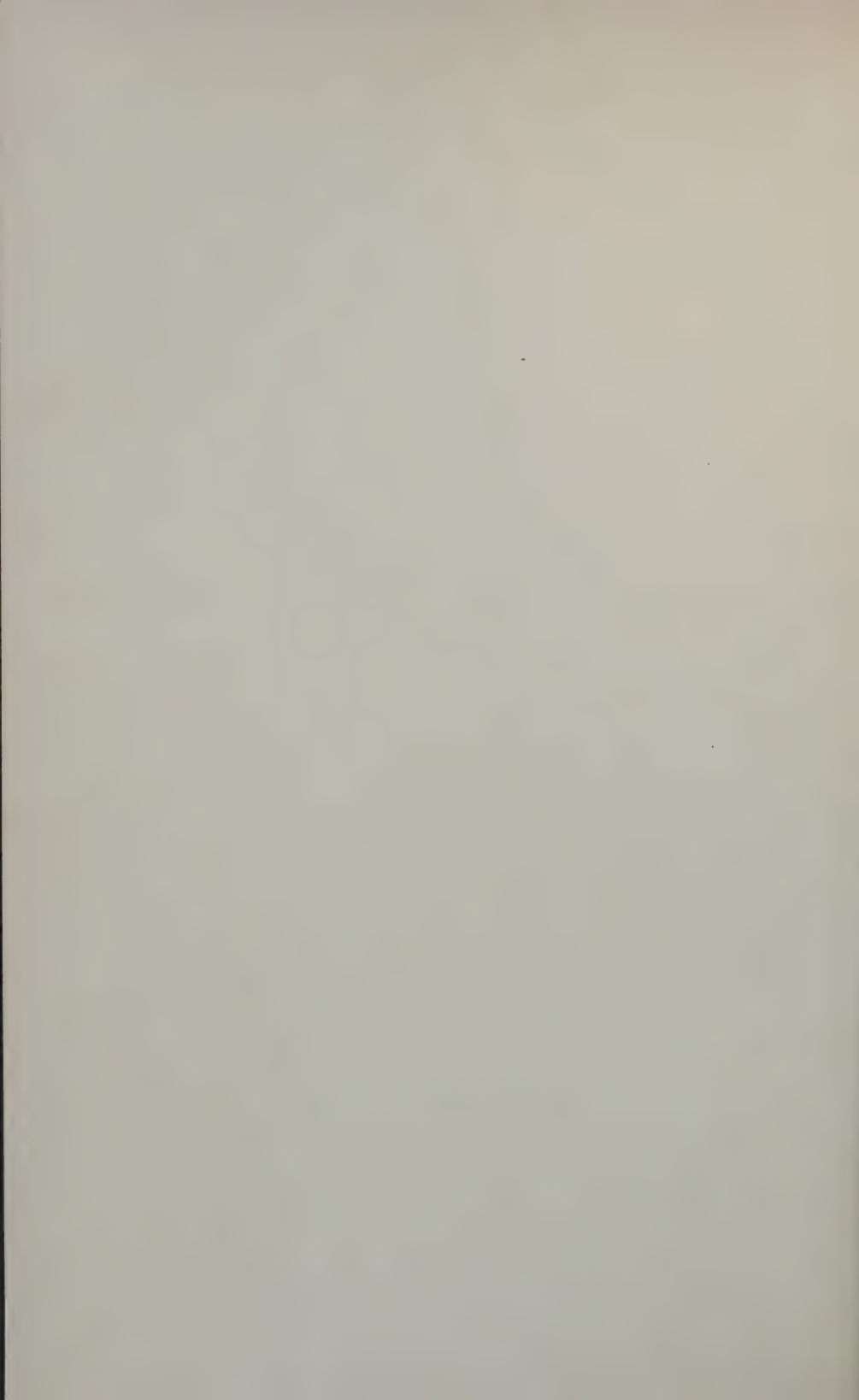
Average cost per mile (including dump), \$7.90.

COST OF MAINTAINING DUMPS.

District	1.	South Boston	\$470 32
Districts	2-3.	East Boston and Charlestown	504 89
District	7.	Roxbury	380 76
District	8.	South End:	
		Day gang	484 06
		Night gang	551 17
District	9.	Back Bay	434 29
District	10.	West End and North End	850 94
Total cost of dumps			<u>\$3,676 43</u>



MACHINE SWEEPING.



REMOVING SNOW.

Including Labor on Crossings, in Streets, Carting of Snow, etc.

District	1.	South Boston	\$2,351 13
Districts	2-3.	East Boston and Charlestown	2,394 84
District	7.	Roxbury	2,873 21
District	8.	South End:	
		Day gang	1,834 29
		Night gang	14,179 89
District	9.	Back Bay	2,670 18
District	10.	West End and North End	7,915 07
Total cost			<u>\$34,218 61</u>

MISCELLANEOUS WORK.

This shows the cost of such work as may not be characterized the same in all districts.

Including Miscellaneous Work, Sweeping and Carting of Leaves, etc.

District	1.	South Boston	\$4 20
Districts	2-3.	East Boston and Charlestown	559 03
District	7.	Roxbury	173 06
District	8.	South End:	
		Day gang	4 20
		Night gang	265 71
District	9.	Back Bay	274 83
District	10.	West End and North End	70 99
Brighton	.		385 68
Total cost			<u>\$1,737 70</u>

CLEANING CROSSINGS.

Including Cost of Manual and Machine Labor.

Cost of cleaning crossings	\$594 43
Removing snow by patrol	4,489 34
Total cost	<u>\$5,083 77</u>

PATROLLING BY DISTRICTS.

This includes the Cost of Picking up and the Removal of Refuse Papers, etc., from the Streets.

Cost of paper patrol	<u>\$413 27</u>
--------------------------------	-----------------

PUSH-CART PATROL SYSTEM.

Superintendence, inspection, etc.	\$2,823 96
Push-carts, including labor and teaming	35,010 26
Total cost	<u>\$37,834 22</u>

Recapitulation of Expenses, exclusive of Superintendence, Stable and Yard Expenses, Stock and Miscellaneous Accounts.

DISTRICTS.	Cost of Cleaning Streets.	Cost of Cleaning Gutters.	Cost of Dumps.	Cost of Snow.	Miscellaneous Work.	Cost of Crossings.	Patrolling in Business District.	Hand Sweeping.	Cost of Patrol System.	Total.
1.....	\$14,539 24	\$1,865 14	\$470 32	\$2,351 13	\$4 20	.....	.....	.....	.....	\$19,230 03
2-3.....	11,739 57	3,326 49	504 89	2,394 84	559 03	.....	.....	.....	.....	18,724 82
7.....	15,110 41	3,915 59	380 76	2,873 21	173 06	.....	.....	.....	.....	22,453 03
8, Day gang..	12,609 92	2,861 72	484 06	1,834 29	4 20	.....	.....	.....	.....	17,794 19
8, Night gang.	38,259 52	.....	551 17	14,179 89	265 71	.....	.....	.....	.....	53,256 29
9.....	5,758 76	3,549 31	434 29	2,670 18	274 83	.....	.....	.....	.....	12,687 37
10.....	30,996 72	417 64	850 94	7,915 07	70 99	.....	.....	.....	.....	40,251 36
Hand sweeping.	.....	.....	.....	Brighton.	385 68	.....	.....	\$9,956 45	.....	385 68
Cost of sweeping crossings.	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,956 45
Patrolling in business districts.....	.....	.....	.....	.....	.....	\$5,083 77	.....	.....	.....	5,083 77
Push-cart patrol system..	.....	.....	.....	.....	.....	.....	\$413 27	.....	.....	413 27
	.....	.....	.....	.....	.....	.....	.....	.....	\$37,834 22	37,834 22
Total	\$129,014 14	\$16,135 89	\$3,676 43	\$34,218 61	\$1,737 70	\$5,083 77	\$413 27	\$9,956 45	\$37,834 22	\$238,070 48

STREET DEPARTMENT — STREET CLEANING DIVISION. 233

STABLE AND YARD EXPENSES.

Including the Cost of the South End, West End, Roxbury, South Boston and Charlestown Stables, as follows :

Superintendence of stables	\$1,395 80
Labor, including the cost of feeders, hostlers, broom-makers, watchmen, yardmen, messenger, etc.	20,579 36
Cart and carriage repairs	5,409 53
Harness repairs	737 76
Horseshoeing	3,006 65
Sweeping machine repairs	2,506 73
Stable and shed repairs	981 75
Street-car tickets and ferry-passes	538 50
Tool repairs	101 96
Veterinary services and medicine	1,017 39
Total	<u>\$36,275 43</u>

STOCK ACCOUNT.

Broom stock purchased	\$5,061 09
Carts and carriages purchased	1,177 50
Harnesses and horse furnishings purchased	677 63
Horses purchased	1,432 50
Tools purchased	717 33
Bag carriers, etc.	723 27
Waste barrels	42 00
Patrol stock and maintenance of same	1,720 81
Total	<u>\$11,552 13</u>

MISCELLANEOUS.

Holidays	\$16,746 51
Scow (cost of disposal at sea of 27,180 loads of street dirt)	4,348 80
Sundries	1,728 45
Royalty on sweeping machines	600 00
Annuity	125 00
Total	<u>\$23,548 76</u>

GENERAL RECAPITULATION OF EXPENSES.

Superintendence	\$10,528 60
Cleaning streets	129,014 14
Hand sweeping	9,956 45
Cleaning gutters	16,135 89
Maintaining dumps	3,676 43
Removal of snow and ice	34,218 61
Miscellaneous work	1,737 70
Cleaning crossings	5,083 77
Paper patrol in business districts	413 27
Patrol system, push-carts	37,834 22
Stable and yard expenses	36,275 43
Stock account	11,552 13
Miscellaneous	23,548 76
Total	<u>\$319,975 40</u>

Of the above amount, the sum of \$3,313.50 was paid by other departments and divisions for work done, etc., making the net expenses of this division — allowing for a decrease in hay and grain stock of \$609.17, on hand at the beginning of the year — as shown in the financial statement, \$316,052.73.

INCOME.

Amount of the bills deposited with the City Collector during the financial year ending January 31, 1899, \$5,880.

Table Showing the Cost per Mile of Cleaning the Streets in Each District, Exclusive of Supervision and Other Expenses.

DISTRICTS.	Miles of Streets Cleaned.	Cost of Cleaning.	Pro Rata Cost of Dump.	Total Cost.	Cost Per Mile.
1.....	1,178.38	\$14,539 24	\$416 84	\$14,956 08	\$12 69
2-3.....	914.59	11,739 57	388 25	12,127 82	13 26
7.....	883.46	15,110 41	302 38	15,412 79	17 44
8 { Day gang.....	1,171.24	12,609 92	394 51	13,004 43	11 10
{ Night gang.....	4,639.23	38,259 52	551 17	38,810 69	8 36
9.....	516.72	5,758 76	268 68	6,027 44	11 66
10.....	2,796.55	30,996 72	839 60	31,836 32	11 38
	12,100.17	\$129,014 14	\$3,161 43	\$132,175 57	

Average cost per mile of cleaning streets in seven districts, exclusive of supervision, \$10.92.

Table Showing the Cost per Mile of Cleaning the Streets in Each District, Including Supervision, Labor, Yard and Stable Expenses.

DISTRICTS.	Miles of Streets Cleaned.	Cost of Cleaning Streets.	53% of the Total Cost of Supervision.	67 % of the Total Cost of Yard and Stable Expenses.	Total Expenses.	Total Cost per Mile.
1.....	1,178.38	\$14,956 08	\$655 25	\$2,666 59	\$18,277 92	\$15 51
2-3.....	914.59	12,127 82	531 33	2,162 32	14,821 47	16 20
7.....	883.46	15,412 79	675 26	2,748 02	18,836 07	21 32
8 { Day gang.....	1,171.24	13,004 43	569 74	2,318 62	15,892 79	13 56
{ Night gang....	4,639.23	38,810 69	1,700 31	6,919 73	47,430 73	10 22
9.....	516.72	6,027 44	264 08	1,074 66	7,366 18	14 25
10.....	2,796.55	31,836 32	1,394 76	5,676 24	38,907 32	13 09
	12,100.17	\$132,175 57	\$5,790 73	\$23,566 18	\$161,532 48	

Average cost per mile of cleaning the streets in seven districts, including supervision, etc., \$13.34.

Table Showing the Number of Loads of Street-dirt Removed.

DISTRICTS.	No. of Loads of Dirt Removed.	Cost per Load of cleaning streets and removing to dumps, including Foreman's superintendence.
1.....	16,953	\$0 96
2-3.....	10,734	1 42
7.....	14,575	1 30
8 { Day gang.....	8,686	1 78
{ Night gang.....	22,450	1 72
9.....	5,867	1 62
10.....	16,848	1 86
	96,113	Barrel and bag loads.
Removed by hand-sweeping gang.....	2,376	28,638
Removed by push-cart, patrol system.....	6,804	96,643
Removed by district push-carts.....		6,424
Removed by paper patrol.....	321	
Totals.....	105,614	131,705

Total number of cart loads removed	105,614
Total number of barrel and bag loads removed	131,705

Twenty-seven thousand one hundred and eighty loads of this dirt (or about 25 per cent.) were delivered at the dumping-scow, the towing of which to sea cost sixteen cents per load.

PUBLIC WASTE-BARRELS.

Total number of waste-barrels emptied	25,982
Total number of barrels emptied in subway	1,166
	<u>27,148</u>

FORCE EMPLOYED.

Deputy Superintendent	1
Clerk	1
Messengers	5
Employees in the Division, not including the above	359
Entire force	<u>366</u>
Average force employed during the year	<u>357</u>

APPENDIX G.

REPORT OF THE DEPUTY SUPERINTENDENT OF
THE STREET WATERING DIVISION.

440 AND 441 TREMONT BUILDING,
BOSTON, February 1, 1899.

MR. BENJ. W. WELLS, *Superintendent of Streets* :

DEAR SIR, — I herewith respectfully submit the annual report of the expenditures, income and operations of the Street Watering Division for the financial year ending January 31, 1899.

Street watering commenced this season on April 10 and ended November 24, and was carried on in accordance with chapter 419 of the Acts of 1897. The late start was due to the unsettled policy of street watering to be pursued during the year. The season was about the average in weather conditions. Much difficulty was experienced during open weather in December, January and February. The thermometer was usually so low during these months that watering could not safely be attempted. So disagreeable were the conditions during January of this year that carts were used in watering on the 21st, 22d, 23d and 24th on the broad thoroughfares of the city proper. They were operated from 9 A.M. until 3.30 P.M., but it must be understood that the temperature was favorable, registering at least 38°. The purpose of the division in the future will be to provide for such conditions, notwithstanding the inconvenience of turning on and off the water and equipping standpipes.

During the season 409.95 miles of streets were watered by this Division. This is an increase of 103.82 miles of streets over last year, due almost entirely to the assumption of the care of paved streets. The new work entailed much extra labor upon the supervising force in the measuring of routes, locating stand-pipes, and incidental details.

Street watering now extends throughout every section of the city. Practically every accepted street which was accessi-



STREET WATERING — CARTS AND INSPECTORS.

ble and the roadbed in condition was watered. The completeness and thoroughness of the work is unequalled anywhere in this country. Nearly all of the streets within a radius of four miles of City Hall were watered four times daily; and some five and six times; those outside that limit twice, and the main thoroughfares outside three and four times, making a very satisfactory service. The carts used in the work were all of modern manufacture.

THE CAR SPRINKLER.

The car sprinkler proved after trial that it would be a satisfactory addition to our street watering force. The American Car Sprinkler Company furnished the car for the test free of charge, and the only expense incurred was that for labor, freight and insurance. The experiment extended from June 15 to the end of the season. From close observation the following appears to be the utmost daily working capacity of the car:

Macadam or asphalt streets,	3.66 miles	6 sprinklings
Paved streets,	5.49 "	4 "
Water capacity of car,		2,000 gallons
Number of loads required,		42 loads

To do the above work it is assumed that hydrants are conveniently located, that is, about 4,500 feet apart. In treating macadam or asphalt streets, six sprinklings are necessary. A fifty-foot roadway is the extreme width of a street which can be taken care of by the car; anything wider will be left dry near the gutter. The car does its best work on paved streets, and can be worked to the best advantage in the outlying sections. One car does the work of three and one-half ordinary watering carts.

ASSESSMENTS.

As an introduction to the subject of assessments it may be interesting to review briefly the past experience of the department in street watering service.

Previous to this year the expense of watering macadam streets has been paid for from the general tax levy. Paved streets were watered at the expense of the abutter, that is, certain districts in paved street sections of the city were given to responsible street watering contractors, who rendered service upon agreements entered into with the abutters. This method of watering paved streets was

objectionable for two reasons: First — The service was not compulsory. Second — The expense was borne by the abutters while on macadam streets the abutters received street watering free of charge.

The effect of the non-compulsory, subscription method of watering paved streets is apparent when it is noted that only one-half of our paved streets were watered under that system. Many abutters by refusing the service, although their neighbors might be willing, prevented the watering of the street, or if they did not prevent it obtained a service the expense of which they did not share. A great many of the citizens objected to the subscription plan because it did not appear to them equitable that the cost of watering macadam streets should be borne by the city, and the expense of watering paved streets be paid for directly by them.

The necessary extension of the service in the macadam sections has of late years made the question of the annual appropriation a serious one. With the necessary increased demands of the large departments upon the money yearly available for municipal purposes the Street Department has been curtailed, and with its other divisions the Street Watering Division was affected, the appropriation being reduced from \$100,000 to \$70,000. This latter sum was becoming more and more inadequate with the growth of the city, and with the paved street question, it became desirable that the whole matter be considered as a new proposition.

The important question involved in the solution of the problem was, how should money for the expense of first-class service be provided? The sum annually available from general taxation was insufficient for the increasing needs of the macadam streets. No proof was needed to show that the watering of paved streets could not be assumed and the expense paid for by the city out of the general tax levy. It was also recalled that previous to 1891 the expense of watering macadam streets was in the main borne directly by the abutters. It is quite true that the Paving Division prior to 1891 always devoted a part of its appropriation to street watering, but this service was not general and only pretended to care for newly surfaced macadam streets. The Paving Division hardly employed more than one watering cart in each district.

While other cities of the United States have never watered their streets as extensively as Boston, yet what they have done has been generally at the expense of the abutters, on the principle, it is presumed, that street watering is a special benefit to property and should be paid for

by them according as they receive the advantage, and not from general taxation. In other words watering by subscription or assessment has been the rule, and Boston has simply been, in part, an exception. Investigation in other cities has shown that street watering, primarily, has been considered a matter resting with the abutters as to its performance, and the unsatisfactory method of subscriptions to private individuals for the work has wholly or in part prevailed. When municipalities have undertaken the work they have not relieved the abutter of his duty to pay for the service. Their interest at all times has been simply to prevent exorbitant charges to the abutters, and when assuming the work to do it at the least possible cost.

In determining assessments for street watering the division was governed by chapter 419 of the Acts of 1897, an act applying to the watering of streets in the cities of the Commonwealth. Under the authority of this act the Superintendent of Streets by direction of the city government proceeded to water all accepted streets, and assess the expense of the same upon the abutter according to the linear foot of frontage of his estate.

It was deemed proper that the area assessed be limited to that within four miles south, and three miles north of City Hall. The section outside of the limits named was paid for out of the general appropriation, and the service furnished was of necessity not as complete as within the assessed district.

In ascertaining the cost of the assessment the division proceeded upon the basis of first-class service, and the work was outlined with that purpose constantly in mind. The assessment of five cents per linear foot of frontage of estates was found to be the figure at which the work could be done. This figure was sufficient, and abutters upon paved streets have been agreeably surprised at their watering charge for a season — lower in many instances than what they used to pay a month to private contractors. There is no question that the experience of last season shows the wisdom of watering by assessment. The charge was small, and very little burden upon the taxpayers.

The levying of the assessment involved a large amount of detail work, which was performed in connection with the sewer assessment and under the same supervision.

The watering of streets is a matter of much concern to our citizens. It is a necessity involving the health and comfort of the people. It is a great benefit to the residential portions of the city, and a little attention to the subject will show that

even to unimproved property it has its advantage in that the street is kept in condition longer by reason of the service. The relation of a well kept roadbed to the value of abutting property, whether improved or unimproved, is too well known to need comment. And the fact that street watering preserves the surface of streets, the maintenance of which is paid for from the general taxation, necessarily benefits all taxpayers. Hence the objection that unimproved property receives no benefit from street watering is upon examination of the question not sustained.

The legality of the street watering act is about to be tested before the Supreme Court of this State in the case of *Joshua M. Sears vs. Board of Aldermen and the Superintendent of Streets of the City of Boston*, in a writ of *certiorari* to quash alleged illegal assessments. Two questions are involved in the case. (1) The constitutionality of the act as a method of taxation by assessment. (2) The constitutionality of the mode of assessment.

The following sums have been expended for street watering during the past eight (8) years :

1891.....	\$104,263 62	1895.....	\$76,424 70
1892.....	94,507 80	1896.....	71,211 81
1893.....	99,430 16	1897.....	78,736 72
1894.....	87,169 08	1898.....	138,728 57

NOTE. — During the year 1897 the sum of \$76,930.40 was expended for the water used in 1896 and 1897. This expense was not paid in previous years, nor was it paid last year, and for the purpose of comparison it has been omitted from the expenditures of 1897 given above. In 1898 the care of paved streets and the increased frequency of watering macadam streets almost doubled the amount of work and accounts for the increased cost. The paved streets were watered in previous years by the subscription method at the expense of the abutter.

Very respectfully,

THOS. J. FINNERAN,

Deputy Superintendent.

FINANCIAL STATEMENT.

Amount of appropriation . . .	\$10,000 00
Transferred from general revenue, . . .	128,728 57
Total	\$138,728 57
Total amount of expenditures	138,728 57

ASSESSMENTS.

Deposited with the City Collector	\$139,238 49
Abated	1,665 70
Collected	108,972 28
Uncollected January 31, 1899	28,600 51

INCOME.

The following sums were charged for street watering, and bills for the same deposited with the City Collector during the financial year ending January 31, 1899 :

Metropolitan Water Board	\$200 00
Fairfax and Beaumont streets	75 00
Louisburg square	26 23
Total	<u>\$301 23</u>

OBJECT OF EXPENDITURES.

Salaries and labor	\$13,572 73
Teaming	105,512 50
Water-posts, repairs, etc.	5,415 39
Board of horses	704 51
Shoeing	141 50
Veterinary services, medicine	51 55
Harnesses	105 25
Telephones	154 94
Bicycles, repairs, etc.	717 78
Printing	228 30
Stationery	139 73
Carts, repairs, etc.	1,097 25
Horse hire	178 00
Electric car, expense of four months' test	1,448 70
Assessments, expense of levying	8,491 74
General supplies	768 70
Total	<u>\$138,728 57</u>

Objects of Expenditures, classified by Districts, from February 1, 1898, to January 31, 1899.

No.	DISTRICTS.	Teaming.	Labor.	Maintenance.	Totals.
1....	South Boston.....	\$8,997 50	\$792 75	\$2,888 65	\$12,678 90
2....	East Boston	6,280 00	458 50	1,925 77	8,664 27
3....	Charlestown	5,567 50	471 45	1,765 28	7,804 23
4....	Brighton.....	9,052 50	743 75	802 40	10,598 65
5....	West Roxbury.....	11,474 25	855 75	1,283 84	13,613 84
6....	Dorchester	13,635 00	917 00	2,086 25	16,638 25
7....	Roxbury.....	18,488 25	917 00	5,295 86	24,701 11
8....	Back Bay.....	9,346 75	1,051 75	2,407 24	12,805 74
9....	South End.....	9,085 00	855 75	2,567 69	12,508 44
10....	City Proper.....	13,585 75	1,117 37	4,012 02	18,715 14
	Totals.....	\$105,512 50	\$8,181 07	\$25,035 00	\$138,728 57

Distribution of Carts, showing Entire Amount of Work done.

No.	DISTRICT.	Hired Carts.	Number Miles Covered.	Average per Cart.
1....	South Boston.....	18	38.34	2.13
2....	East Boston	12	26.87	2.24
3....	Charlestown.....	11	22.29	2.02
4....	Brighton	17	33.23	1.95
5....	West Roxbury.....	23	61.76	2.68
6....	Dorchester	27	72.90	2.70
7....	Roxbury	33	81.12	2.46
8....	Back Bay	15	21.44	1.43
9....	South End.....	16	19.56	1.22
10....	City Proper	25	32.44	1.30
	Totals.....	197	409.95	2.08

The above summary indicates the completeness of the work done by the division. The number of carts was increased from 116 to 197, and the miles of streets from 306.13 to 409.95, an increase of 81 in the number of carts, and an increase of 103.82 miles of streets. This increase in a great measure was due to the care of paved streets, which in the past have been watered by, and at the election of, the abutters.

Location of Water Posts by Districts.

DISTRICTS.	Year.			Increase over 1897.	Electric Hydrants.
	1891.	1897.	1898.		
South Boston.....	23	28	35	7	
East Boston	16	34	41	7	
Charlestown.....	19	20	20		
Brighton	25	44	47	3	
West Roxbury.....	50	67	75	8	
Dorchester	61	83	88	5	
Roxbury	53	68	76	8	
City Proper.....	24	53	69	16	5
Totals.....	271	397	451	54	5

NOTE. — An increase of 180 water-posts since 1891.

The division is indebted to Mr. J. W. Smith, the Local Forecast Official, for daily weather reports.

Our acknowledgments are also due to the Water Department for its uniform assistance in the erection and repair of standpipes.

APPENDIX H.

CITY OF BOSTON, ENGINEERING DEPARTMENT,
50 CITY HALL, February 1, 1899.

MR. BENJ. W. WELLS, *Superintendent of Streets* :

SIR, — I herewith submit the following report of the work done under my direction for the Street Department during the year 1898.

The work covers the same ground as heretofore, namely, the supervision of the construction of assessment streets, boulevards, street paving and consideration and reports upon various questions which arise concerning the work.

The repairs upon asphalt pavement have been supervised, and a table is annexed giving the amount of repairs and the cost in detail on all asphalt pavement upon which the maintenance guaranty has expired. The table showing details of all asphalt streets in the city has been corrected to date.

On Columbus-avenue extension the work has been in progress throughout the year, and the avenue was so far completed as to be in use in December.

Columbia road construction has been in progress during the year. The first section extending from Blue Hill avenue to Stanwood street has been completed, and the prospect is good that the work will be finished to Edward Everett square in the time allowed in the two remaining contracts, on or before July 1, 1899. No work has been done on the bridge at the crossing of the New York, New Haven & Hartford Railroad.

The filling done during the year, other than that done by the Park Department, has been at the foot of Mercer street and along Ninth street. About 21,000 cubic yards of earth have been deposited at the foot of Mercer street under several small contracts, the material having been brought from the hills of South Boston.

On October 25, 1898, a contract was made with Simon J. Donovan for filling that portion of Columbia road between Atlantic and I streets. Under this contract 16,267 cubic yards have been deposited.

On December 28, another contract was made with Mr. Donovan for filling the section of the road between Mercer and Mt. Vernon streets, and building an extension of the culvert under the railroad. A small amount of filling has been done and work begun on the culvert.

On October 10, 1898, a contract was made with Dennis F. O'Connell for building the abutments and pier of the bridge to carry Columbia road over the New York, New Haven & Hartford Railroad, and also over the new Columbia avenue. The foundations and about one-half of the stone masonry have been built and the excavation made for the pier.

IPSWICH STREET.

On account of the laying out of this street across the Fens the following structures were required:

A retaining-wall on the northerly line of the street, which line was also the southerly line of the location of the Boston and Albany Railroad, for a length of 530 feet easterly from the easterly line of the Fens.

A bridge over the Fens waterway and a bridge to carry the park driveway in Charlesgate West over Ipswich street. All the masonry work in these structures was built under a contract with Messrs. Holbrook, Cabot and Daly, dated November 29, 1897, and the work was completed on September 13, 1898, at a total cost of \$40,528.99.

The retaining-wall along the railroad serves to support the street, and has a height above the railroad varying from 1 foot 6 inches to 6 feet and a length of 530 feet. It is a rubble wall with a cut coping 2 feet wide by 1 foot 6 inches high. Owing to the small height of this wall no piles were used, the foundation extending only 4 feet below the grade of the railroad.

The bridge over the waterway, so far as the masonry is concerned, is an extension of the abutments and piers of the bridge on the railroad. The foundation consists of a pile and timber platform extending the full width of the waterway and abutments, the upstream end being protected by a line of 4-inch sheet piling. The platform is at grade -0.5 and the tops of the piers are at grade 12.25. There are two piers each 3 feet wide and three openings for the waterway each 17 feet wide. A supplementary agreement was made with the contractors for the masonry for building the superstructure of this bridge except the railing. The bridge is built of steel beams of depths varying, to conform to the crown of the roadway, from 10 inches in the gutter to

20 inches on the outer lines of the bridge; they are spaced from 2 feet to 3 feet 2 inches apart; the spaces between the beams and above them to within $2\frac{1}{2}$ inches of the surface of the street are filled with Portland cement concrete; sheets of expanded metal are imbedded in the concrete 2 inches above the under surface, this surface being flush with the bottoms of the beams; on top of the concrete an asphalt covering was laid $2\frac{1}{2}$ inches thick. There is a sidewalk 8 feet in width on the southerly side of the bridge, but none on the northerly side, a curb being placed on this side one foot from the outer line. The depth of the bridge is 20 inches on the outside lines, 19 inches at the sidewalk curb and 14 inches in the gutter. The surface of the bridge is 61 feet in length by 50 feet in width.

For building the bridge on Charlesgate West it was necessary to remove a portion of the old retaining wall on the easterly line of the Parkway, and the whole of the wall on the westerly line of the Parkway down to the sub-grade of Ipswich street, excavate the earth within the lines of the new street and the bridge abutment, build a new face on the back of the abutment of the bridge over the railroad and build a new abutment on the southerly line of the new street. The Parkway was originally graded by filling with coarse gravel from the original grade of the flats, which was about grade 2, to grade 34. Borings taken after the required excavation was made, showed that the soft mud underneath the filling, which previous to the filling was 14 feet in depth, had been either compressed or displaced so that the filling extended down to grade —6.

Great difficulty was experienced in driving the piles for the abutment on account of the character of the filling; where the attempt was made to drive all of the piles called for by the plan it is probable that not more than one-half of them reached the natural hard bottom which was at grade —28. The piles were driven in a trench excavated to grade 4 or about 10 feet below the grade of the ground in front of the abutment and about 26 feet below the undisturbed surface in the rear of the abutment. Many of the piles were broken in driving, and some that were drawn up after being driven were found crippled and broomed at the points. A water jet was tried, but the filling was so coarse that the jet had no effect upon it; iron shoes were used on the piles, but still they were crippled; finally only every alternate pile was driven and these seemed to reach hard bottom and to so compact the material that no more piles could be driven. The piles were spaced, according to the plan, 2 feet apart

on centres in each direction, there being 9 piles in each row at right angles to the face of the abutment; 329 piles were driven out of 621 called for by the plan. No settlement has been detected in the masonry. It is probable that the great weight of the filling 38 feet in depth which has rested on the mud for the past 15 years has so consolidated it that it is able to support the masonry with the help of a smaller number of piles than would otherwise be necessary.

The abutment is 106 feet in length at the ground line and has a retaining or wing-wall returned on the westerly line of the Parkway, a distance of 35 feet, for the purpose of preventing the filling on the Parkway from encroaching on the street. The easterly end of the abutment is connected with the old retaining-wall. The foundation is 18 feet wide, projecting at the bottom 6 feet 6 inches in front of the exposed face of the abutment. The piles were cut off 1 foot above the bottom of the trench or at grade 5. The masonry from grade 4 to grade 11 was of American cement concrete composed of 1 part cement, 2 parts of sand and 5 parts of gravel. The concrete had a width on top of 14 feet 8 inches, the front line being 3 feet 2 inches in front of the exposed face of the wall. On this was laid a footing course of granite 2 feet thick and 13 feet wide, projecting 2 feet in front of the wall above it.

The masonry above the footing course is of quarry-faced Rockport granite laid in horizontal courses in American cement mortar with 1-inch joints. The back of the old abutment of the bridge over the railroad was faced with quarry-faced ashlar, by cutting away the backing of the two lower courses sufficiently to allow laying two courses of stretchers above the old foundation; the lower course was bolted to the backing of the same course by two 1½-inch bolts to each stone and this course and the next two above it were clamped to the old work by two ½-inch wrought iron clamps to each stone. The bridge seat courses of both abutments are of cut stone 2 feet rise and 5 feet wide; these are surmounted by cut stone parapets, the tops of which conform to the shape of the roadway and walks. Ballast of quarry chips was placed in the rear of the abutment.

A temporary wooden bridge was erected to carry the park drive over the street at a cost of \$565.57, and the drive was opened to travel on July 13.

On July 25, 1898, a contract was made with the James Russell Boiler Works Company for building iron fences on each side of Ipswich street across the Fens. On the waterway bridge there is a railing 3 feet 6 inches high of three 2-inch

wrought iron pipes with cast iron posts; the remainder of the fence consists of two rails of $2\frac{1}{2}$ -inch $\times$ $\frac{1}{2}$ -inch wrought iron posts of $2\frac{1}{2}$ -inch $\times$ 1-inch wrought iron set in cast iron bases, and palings of $\frac{3}{4}$ -inch round iron spaced $4\frac{1}{2}$ inches apart; the fence is 6 feet high. The work was completed on November 7, at a cost of \$889.

The table showing lengths and areas of paving on accepted streets and public alleys has been brought up to February 1, 1899.

Street paving has been supervised in all cases where requested. All paving laid on the before-mentioned avenues is included in the quantities given. All granite block paving on concrete base has been laid with pitch and pebble joints *except* 1,702 square yards which on account of unfavorable weather, was laid temporarily with gravel joints.

Granite block pavement on a concrete base, laid with pitch and pebble joints, 39,789 square yards.

Granite block pavement on a gravel base, laid with pitch and pebble joints, 2,676 square yards.

Granite block pavement on a concrete base, laid with gravel joints (temporarily), 1,702 square yards.

Granite block pavement on a gravel base, laid with gravel joints, 37,030 square yards.

Trinidad lake asphalt, with a binder course of asphaltic cement concrete, on an American cement concrete base, 5,166 square yards, at an average cost of about \$3.00 per square yard.

Sicilian rock asphalt on an American cement concrete base, 2,804 square yards, at an average cost of about \$3.00 per square yard.

Asphaltina, on an American Portland cement concrete base, 569 square yards, at a cost of \$2.93 per square yard.

The cost per square yard of asphalt given above does not include the cost of preparing roadbed, except in the case of Asphaltina pavement, the price for which includes all work. All asphalt is laid with a maintenance guaranty for five years, except that Public Alley No. 437 is laid with a guaranty for ten years.

Edgestone set, 85,818 linear feet; gutter paving laid, 23,035 square yards; brick sidewalks laid, 27,883 square yards; crushed stone sidewalks constructed, 25,390 square yards.

Artificial stone sidewalks, 37,310 square feet; flagging crosswalks laid, 5,686 square yards; macadam surface (6 inches), 44,600 square yards; Telford (8 inches) macadam (4 inches), 33,900 square yards.

A List of Streets Paved with Sheet Asphalt, and having a Maintenance Guaranty, February 1, 1899.

TRINIDAD ASPHALT.
City Proper.

NAME.	Limits.	Base.	Length feet.	Length miles.	Area.	Guaranty expires.
Barton ct.....	Brighton st. to Barton st.....	Cobble.....	134	.025	186	May 16, 1899
Batterymarch st.....	Milk st. to Liberty sq.....	Concrete.....	150	.028	466	Sept. 28, 1901
Beacon st.	150 ft. from west curb line of Gloucester to 68 ft. beyond west line of Gloucester st...	Concrete.....	218	.041	1,183	June 16, 1903
Bond st.....	Hanson st. to Milford st.....	Concrete.....	192	.036	426	July 1, 1900
Boylston st.....	Easterly side of Berkeley st. across Clar- endon st.....	Concrete.....	656	.124	3,869	Oct. 4, 1902
Brimmer st.....	Beacon st. to Pinckney st.....	Concrete.....	1,087	.206	3,300	Aug. 31, 1900
Chambers st.....	Green st. across Poplar st.....	Cobble.....	460	.087	1,061	May 16, 1899
Chambers st.....	Brighton st. to Charles st.....	Cob. & Conc.	272	.052	604	July 1, 1900
Charter st.....	Hanover st. across Unity st.....	Cobble.....	318	.060	636	May 16, 1899
Columbus ave.....	Massachusetts ave. to 301 ft. south of Camden st.....	Concrete.....	903	.171	5,418	Nov. 7, 1901
Cooper st.....	Endicott st. to Charlestown st.....	Concrete.....	205	.039	604	Sept. 27, 1902
Corning st.....	Washington st. to Shawmut ave.....	Concrete.....	338	.064	734	May 25, 1901
Court sq.....	Easterly side.....	Concrete.....	333	.063	942	June 14, 1899
Dartmouth st.....	Boylston st. to Newbury st.....	Concrete.....	266	.050	2,058	Sept. 8, 1899
Edinboro' st.....	Essex st. to Beach st.....	Concrete.....	470	.089	924	Aug. 14, 1900
Harrison ave.....	E. Newton st. to E. Springfield st.....	Concrete.....	928	.176	2,681	Aug. 14, 1900
Harrison ave.....	E. Springfield st. to Roxbury line.....	Concrete.....	.....	.....	130	Aug. 14, 1900
Kilby st.....	State st. to Milk st., including Liberty sq...	Concrete.....	640	.121	4,059	Sept. 28, 1903
Laconia st.....	Washington st. to Harrison ave.....	Concrete.....	330	.063	727	June 18, 1901
La Grange st.....	Tremont st. toward Washington st.....	Concrete.....	181	.034	355	Oct. 23, 1902
Lincoln pl.....	Worcester st. to W. Springfield st.....	Concrete.....	217	.041	313	Aug. 17, 1902
North Margin st.....	Stillman st. to Thacher st.....	Concrete.....	515	.098	1,154	Sept. 10, 1900
Oxford st.....	Beach st. to Essex st.....	Macadam.....	430	.081	735	Nov. 1, 1899
Parkman st.....	N. Anderson st. across Blossom st.....	Concrete.....	241	.046	550	Oct. 14, 1903

Pineckney st.	Charles st. across Brimmer st.	Concrete	271	.051	723	Aug. 31, 1900
Pine st.	Washington st. to Harrison ave.	Concrete	419	.079	597	18, 1901
Public Alley 437.	Berkeley st. to Arlington st.	Concrete	631	.120	561	Dec. 10, 1908
Spring st.	Poplar st. to Leverett st.	Concrete	447	.085	908	May 20, 1900
Stevens st.	Lincoln pl. toward Shawmut ave.	Concrete	16	.003	22	Aug. 17, 1902
Tileston st.	Salem st. to Unity st.	Concrete	163	.031	124	Aug. 14, 1900
Unity st.	Charter st. to Tileston st.	Concrete	330	.063	500	Oct. 6, 1902
Water st.	Liberty sq. to Broad st.	Concrete	252	.048	682	Oct. 10, 1901
Wiget st.	Salem st. to North Margin st.	Concrete	259	.049	240	Sept. 25, 1902
Totals .....	.....	.....	12,272	2.341	36,472	

Charlestown.

Bunker Hill st.	At Tufts st.	Concrete .....	.....	.....	150	Nov. 3, 1902
Corey st.	Moulton st., 124 ft. toward Medford st.	Concrete	124	.024	276	Nov. 3, 1902
Moulton st.	Easterly side Corey st. to Vine st.	Concrete	81	.015	243	Nov. 3, 1902
Rutherford ave.	Vine st. to Bunker Hill st.	Concrete	130	.025	390	Nov. 3, 1902
Tufts st.	Devens st. toward Chapman st.	Concrete	128	.024	284	Nov. 5, 1902
Vine st.	Bunker Hill st., northerly	Concrete	141	.027	415	Nov. 3, 1902
	Bunker Hill st. across Moulton st.	Concrete	165	.031	670	Nov. 3, 1902
Totals .....	.....	.....	769	.146	2,428	

Roxbury.

Cabot st.	East side Vernon st. to Linden Park st.	Concrete	484	.091	1,390	Aug. 30, 1902
Columbus ave.	301 ft. south of Camden st. across Terry st., ...	Concrete	2,640	.500	15,840	Nov. 7, 1901
Totals .....	.....	.....	3,124	.591	17,230	

STICLIAN ROCK ASPHALT.
City Proper.

NAME.	Limits.	Base.	Length feet.	Length miles.	Area.	Guaranty expires.
Acton st.....	Washington st. to Bradford st.	Concrete	259	.049	352	Nov. 1, 1901
Albany st.....	Easterly side of Stoughton st. across E. Concord st.	Concrete	285	.054	1,710	Nov. 8, 1902
Ash st.....	Oak st. across Nassau st.	Cobble	220	.041	391	Oct. 26, 1899
Avery st.....	Washington st. to Mason st.	Concrete	360	.068	275	Oct. 18, 1902
Barton st.....	Leverett st. to Milton st.	Concrete	427	.081	723	Aug. 14, 1900
Bradford st.....	Waltham st. to Shawmut ave.	Concrete	600	.114	1,270	Sept. 11, 1902
Charles st.....	Front of Eye and Ear Infirmary Washington st. to Shawmut ave.	Concrete	191	.036	225	Oct. 8, 1899
Cobb st.....	Chauncy st. to Harrison ave.	Concrete	347	.066	1,041	Sept. 16, 1902
Exeter pl.	Newland st. to Ivanhoe st.	Concrete	170	.032	387	Oct. 20, 1902
Fabin st.....	Dover st. to Harrison ave.	Concrete	421	.080	615	Sept. 10, 1900
Fay st.....	Mystic st. to Harrison ave.	Cobble	318	.060	560	July 26, 1899
Hamburg st.....	Tileston st. across Charter st.	Concrete	383	.073	597	Oct. 1, 1901
Hanover st.....	B. & A. R.R. Bridge to Cumberland st.	Concrete	315	.060	934	May 14, 1901
Huntington ave.	213 ft. south of West st. for a distance of 231 ft. southerly	Concrete	1,591	.301	8,840	Oct. 12, 1901
Mason st.....	Washington st. to Albany st. (southerly roadway)	Block	231	.044	480	May 25, 1899
Massachusetts ave.....	Castle st. to Cobb st.	Concrete	662	.125	4,151	Sept. 17, 1899
Mayo st.....	E. Dedham st. to Malden st.	Concrete	251	.048	418	Sept. 11, 1902
Meander st.....	Malden st. to E. Dedham st.	Concrete	307	.058	437	Sept. 3, 1901
Mystic st.....	E. Dedham st. to E. Canton st.	Concrete	204	.039	226	Oct. 20, 1901
Mystic st.....	E. Canton st. to E. Brookline st.	Concrete	215	.041	335	Oct. 20, 1901
Mystic st.....	Thacher st. toward Endicott st.	Concrete	216	.041	337	Oct. 20, 1901
North Margin st.	Mystic street to Meander st.	Concrete	205	.039	518	Nov. 19, 1902
Norwich st.	Washington st. to Shawmut ave.	Concrete	221	.043	339	Sept. 24, 1901
Ohio st.....	Front of Suffolk County Court House Hanover st. to Bennet ave.	Concrete	343	.065	277	July 30, 1901
Pemberton sq.....		Concrete	323	.061	1,365	May 8, 1899
Prince st.....		Concrete	293	.055	654	July 1, 1900

Shawmut ave.	132 ft. south of Castle st. across Cherry st. .	Concrete	227	.062	945	Sept. 19, 1903
Taylor st.	Dwight st. to Milford st.	Concrete	196	.037	274	May 29, 1901
Whitmore st.	Kneeland st. to Harvard st.	Concrete	249	.047	445	Aug. 14, 1900
Totals. ....	.....	.....	10,130	1.919	29,121	
<i>Charlestown.</i>						
Warren st.	Winthrop st. to Soley st.	Concrete	127	.024	365	Sept. 10, 1900
<i>South Boston.</i>						
Athens st.	W. Second st. to A st. ....	.....	617	.117	916	Oct. 9, 1900
E. Broadway.	Front of Lincoln School.	Concrete	180	.034	1,000	Oct. 7, 1902
K st.	E. Sixth st. to E. Eighth st.	Concrete	566	.107	1,083	May 20, 1901
W. Broadway.	N. Y. & N. E. R.R. Bridge to E st. (4 ft. gutters)	Concrete .....	.....	.....	1,487	Oct. 2, 1902
W. Broadway.	130 ft. west of F st. to 267 ft. east of F st. .	Concrete	448	.085	1,544	Oct. 28, 1902
W. Broadway.	267 ft. east of F st. to 44 ft. west of Dorchester st.	Concrete	410	.078	1,818	Dec. 15, 1903
Totals. ....	.....	.....	2,221	.421	7,848	
<i>Roxbury.</i>						
Columbus ave.	Terry st. to within 61 ft. of Station st.	Concrete	884	.168	5,304	Oct. 23, 1901
Huntington ave.	Easterly side of Cumberland st. to Massachusetts ave.	Concrete	747	.141	4,150	Oct. 12, 1901
Huntington ave.	Massachusetts ave. to Gainsborough st.	Concrete	587	.111	3,372	Oct. 12, 1901
Totals. ....	.....	.....	2,218	.420	12,826	

SEYSSSEL ASPHALT.

NAME.	Limits.	Base.	Length feet.	Length miles.	Area.	Guaranty expires.
Paul st.....	Emerald st. to Village st.....	Concrete	133	.025	236	Oct. 23, 1902
Paul st.....	Village st. to Tremont st.....	Concrete	276	.052	456	Oct. 23, 1902
Pelham st.....	Washington st. to Shawmut ave.....	Concrete	320	.061	693	Oct. 12, 1902
Waterford st.....	Washington st. to Shawmut ave.....	Concrete	316	.060	544	Nov. 13, 1902
Totals .....	.....	.....	1,045	.198	1,929	.....

ASPHALTINA.

Hayward pl.....	Washington st. to Harrison ave.....	Concrete	260	.049	578	Nov. 7, 1903
Massachusetts ave.....	Columbus ave. to Tremont st. (northerly roadway).....	Concrete	267	.050	1,622	Oct. 11, 1902
Totals .....	.....	.....	527	.099	2,200	

SUMMARY.

Trinidad asphalt.....	.....	16,165 feet, or 3.077 miles, or 57,130 square yards.
Siellian rock asphalt.....	.....	14,569 feet, or 2.760 miles, or 49,795 square yards.
Seyssel asphalt.....	.....	1,045 feet, or 0.198 miles, or 1,929 square yards.
Asphaltina.....	.....	527 feet, or 0.099 miles, or 2,200 square yards.

Total sheet asphalt under maintenance guaranty, February 1, 1899.....32,306 feet, or 6.135 miles, or 111,054 square yards.

Cost of Asphalt Patching, 1898.

TRINIDAD ASPHALT.

STREET.	Year laid.	Base.	Length miles.	Total yards in street.	Yards resurfaced.	Cost of patching.	Cost per square yard of surface.
Liberty sq., that part east of Kilby st.....	1881	Concrete ..	.....	505	.....	.....	.....
Court sq., westerly side.....	1881	Concrete ..	.064	950	129.92	\$324 79	\$0.342
Doane st., Kilby to Broad st.	1881	Concrete ..	.059	624	24.50	61 25	.098
Congress sq. intersection.....	1883	Concrete ..	.004	37	2.50	6 25	.169
N. Bennet st., Hanover to Salem st.....	1883	Cobble	.105	920	83.64	209 10	.227
Albany st., Concord to Springfield st.....	1884	Concrete ..	.085	2,700	*81.43	195 73	.072
Endicott st.....	1884	Cobble	.059	1,005	55.04	137 60	.137
Ash st., Bennet to Nassau st.....	1887	Concrete ..	.044	427	28.23	70 58	.165
Bennet st., Washington st. to Harrison ave.....	1887	Concrete ..	.034	350	58.99	147 47	.421
Central st., Kilby to Broad st.....	1887	Concrete ..	.059	869	22.45	56 13	.065
Cooper st., N. Margin to Endicott st.....	1887	Concrete ..	.037	597	3.36	8 40	.014
Exchange pl., Congress to Kilby st.....	1887	Concrete ..	.046	678	37.32	93 30	.138
Poplar st., Spring to Charles st.....	1887	Cobble	.109	1,192	24.71	61 77	.052
Tileston st., Hanover st. across Unity st.....	1887	Cobble	.048	350	28.71	71 78	.205
Wiggin st., Tileston to N. Bennet st.....	1887	Cobble	.020	119	1.65	4 12	.035
W. Sixth st., between C and D	1887	.....	.017	343	2.06	5 15	.015
Brattle sq., Brattle to Elm st.....	1888	Concrete ..	.053	670	21.91	54 77	.082
D st., Fifth to Gold.....	1889	.....	.024	448	25.08	62 70	.140
Water st., Congress to Kilby st.....	1889	Concrete ..	.048	694	143.06	357 65	.516
Austin st., Charlestown, Seminary pl. to Lawrence st.	1891	Concrete ..	.027	421			
<i>Carried forward</i> .....	.....	.....	.942	13,899	769.56	\$1,929 44	\$2.893

* Part surface heater work.
 Prices paid, \$2.50 per square yard, entire removal. Average cost, \$0.155 per yard.
 Prices paid, \$2.50 per square yard, surface heater work.

Cost of Asphalt Patching, 1898. — *Concluded.*

TRINIDAD ASPHALT.

STREET.	Year laid.	Base.	Length miles.	Total yards in street.	Yards resurfaced.	Cost of patching.	Cost per square yard of surface.
<i>Brought forward</i>							
Beacon st., Charles, across Arlington st.	1891	Concrete ..	.942	13,899	769.56	\$1,929 44	\$2.893
Cabot st., Tremont to Ruggles st.	1891	Concrete ..	.165	3,800	104.42	261 05	.069
Court st., Washington to Court sq.	1891	Concrete ..	.234	3,571	35.09	87 72	.025
Hollis st., Tremont toward Washington st.	1891	Block	.044	642	57.36	143 40	.223
Hudson st., Beach to 90 ft. north of Curve st.	1891	Concrete ..	.052	521	31.01	77 53	.149
Moore st., North sq. to Fleet st.	1891	Concrete ..	.266	3,938	200.70	501 75	.127
Moon st., North sq. to Fleet st.	1891	Cobble	.034	384			
Rogers st., Dorchester ave. to Preble st.	1891	Cobble	.068	480			
Sun Court st., Moon st. to North st.	1891	Cobble	.029	218	1.32	3 30	0.015
Warrenton st.	1891	Concrete ..	.216	2,497	17.91	44 78	.018
Beacon st., Dartmouth st. to within 150 ft. of Gloucester st.	1892	Concrete ..	.330	9,277	*482.64	1,201 25	.129
Brighton st., Leverett st. to Allen st.	1892	Cobble	.160	1,737	87.29	218 22	.126
Cherry st., Washington st. to Shawmut ave.	1892	Concrete ..	.063	594	19.53	48 83	.082
Clark st., Hanover st. to North st.	1892	Concrete ..	.060	614			
Davis st., Washington st. to Harrison ave.	1892	Concrete ..	.061	646			
Groton st., Washington st. to Shawmut ave.	1892	Concrete ..	.063	558			
Hanover ave., Hanover st. to North st.	1892	Concrete ..	.058	266			
Malcolm st., Mt. Vernon st. to Chestnut st.	1892	Concrete ..	.049	290			
Massachusetts ave., Columbus ave. to Washington st., southerly roadway.	1892	Concrete ..	.174	5,549	228.74	571 85	.103
Poplar st., Chambers st. to Spring st.	1892	Cobble	.115	1,250	3.36	8 40	.007
Stillman st., Salem st. to Endicott st.	1892	Concrete ..	.028	417			
Stoddard st., Howard st. to Court st.	1892	Concrete ..	.026	150	4.70	11 75	.078
Thacher st., Charlestown st. to Endicott st.	1892	Concrete ..	.038	562	7.84	19 60	.035

Cabot st., Ruggles st. to Vernon st., ...	1892	Concrete ..	.137	2,988	6.06	15 15	.005
E st., W. Third st. to Bolton st., ...	1892	.....	.021	419			
W. Third st., west of E st., across E st., ...	1892	.....	.035	769			
Columbus ave., B. & A. R.R. to Massachusetts ave., .....	.....	Concrete ..	.663	15,000	2,404.20	6,010 50	.401
Harrison ave., .....	.....	Concrete ..	.144	995	10.06	25 15	.025
Totals.....	.....	.....	4.275	72,031	4,476.79	\$11,178 77	\$5,510

* Part surface heater work.

Prices paid, \$2.50 per square yard, entire removal. Average cost, \$0.155 per yard.
Prices paid, \$2.50 per square yard, surface heater work.

SICILIAN ROCK ASPHALT.

STREET.	Year laid.	Base.	Length miles.	Total yards in street.	Yards resurfaced.	Cost of patching.	Cost per square yard of surface.
Broadway, Dorchester ave. to A st., ...	1892	Concrete ..	.068	2,000	183.80	\$459 50	\$.230
Decatur st., Washington st. to Harrison ave., ...	1892	Concrete ..	.070	781	18.09	45 22	.038
Motte st., Washington st. to Harrison ave., ...	1892	Concrete ..	.063	516	4.12	10 30	.020
Athens st., B st. to C st., ...	1892	Concrete ..	.098	746			
Totals.....	.....	.....	.299	4,043	206.01	\$515 02	\$.308

Price paid, \$2.50 per square yard.
Average cost, \$0.127 per square yard.

Beacon street, from 98 feet east of the easterly line of Gloucester street to 128 feet west of the easterly line of Gloucester street, was paved with 2 inches of Trinidad lake asphalt, with $1\frac{1}{2}$ inches of bituminous concrete binder, on a 6-inch American cement concrete base, by the Barber Asphalt Paving Company. The old pavement was removed, roadway excavated, edgestones reset and crosswalks laid by the Street Department. Former pavement was Hastings asphalt blocks on a gravel base, laid in 1892.

Brattle street, Court street to Washington street, was repaved with old granite blocks on a gravel base, with pitch and pebble joints. The old blocks were barred out and bed prepared by the Street Department. Roadway was repaved, edgestones reset, brick sidewalks and flagging crosswalks relaid by H. Gore & Co. With the exception of a small portion near Washington street, for which it paid for by agreement, The Boston Elevated Railway Company repaved its track.

Brighton street, Lowell street to Leverett street, including tracks of the Boston Elevated Railway Company, was paved with large granite blocks on a gravel base with pitch and pebble joints. The old pavement was removed and bed prepared by the Street Department. Roadway paving was laid, edgestones reset, brick sidewalks and flagging crosswalks relaid by Dennis J. Kiley. The Boston Elevated Railway Company, by agreement, paid for the portion within its tracks. Former pavement was old granite blocks on gravel bed and gravel joints.

Bunker Hill street, Chelsea street to Elm street, including the tracks of the Boston Elevated Railway Company, was paved with large granite blocks on a gravel base with gravel joints. The old pavement was removed and bed prepared by the Street Department. Roadway paving was laid, edgestones reset, brick sidewalks and flagging crosswalks were relaid by John Turner & Co. The Boston Elevated Railway Company, by agreement, paid for the portion within its tracks. Former pavement was old granite blocks on a gravel base with gravel joints. Eight new catch-basins were built; three of them were Bradlee head pattern and five cast-iron D-frame pattern.

Commercial street, State street to Clinton street, was paved with large granite blocks on a 6-inch American cement concrete base with pitch and pebble joints. The old pavement was removed and roadway excavated by the Street Department, concrete base laid by Perrin & Carter, roadway paving laid, edgestones reset, brick sidewalks and flagging crosswalks laid by H. Gore & Co. Former pavement was old granite blocks on gravel base, with gravel joints.

Hanover street, Court street to Washington street, including tracks of the Boston Elevated Railway Company, was paved with "Philadelphia" size granite blocks on a 6-inch American cement concrete base with pitch and pebble joints. The old pavement was removed and roadway excavated by the Street Department, concrete base laid by Perrin & Carter, roadway

paving laid, edgestones reset, brick sidewalks and flagging crosswalks laid by H. Gore & Co. The Boston Elevated Railway Company, by agreement, paid for the portion within its tracks. Former pavement was old granite blocks on a gravel base, with gravel joints.

Hayward Place, Washington street to Harrison avenue, was paved with $2\frac{1}{2}$ inches of asphaltina (a patented coal tar production) on a 6-inch American Portland cement concrete base by the Boston Paving Company. The old pavement was removed and roadway excavated by the Boston Paving Company. Former pavement was old granite blocks on a gravel bed, with gravel joints. One new catch-basin was built.

Howard street, Bulfinch street to Court street, was paved with large granite blacks on a 6-inch American cement concrete base, with pitch and pebble joints. The old pavement was removed and roadway excavated by the Street Department. Concrete base was laid by Perrin & Carter, roadway paving was laid, edgestones set, brick sidewalks and flagging crosswalks laid by H. Gore & Co. Former pavement was old granite blocks on gravel base, with gravel joints.

Kilby street, State street to Milk street, was paved with $1\frac{1}{2}$ inches Trinidad Lake asphalt, with $1\frac{1}{2}$ inches of bituminous concrete binder on existing concrete base, by the Barber Asphalt Paving Company. The old surface was removed; concrete base was regraded by the Asphalt Company. Former pavement was Trinidad Lake asphalt, originally laid in 1881.

Parkman street, North Anderson street across Blossom street, was paved with $1\frac{1}{2}$ inches of Trinidad Lake asphalt, with $1\frac{1}{2}$ inches of bituminous concrete binder on a 6-inch American cement concrete base, by the Barber Asphalt Paving Company. The roadway was excavated and gutter blocks removed by the Street Department. Former surface was macadam, with granite block gutters.

Shawmut avenue, from southerly side of Cherry street to 108 feet north of Cobb street, between the rails of surface tracks and curbs, was paved with $2\frac{1}{2}$ inches of Sicilian rock asphalt on a 6-inch American cement concrete base, by the Boston Asphalt Company; the spaces between the rails and tracks of the Boston Elevated Railway Company were paved with large granite blocks on a 6-inch American cement concrete base, with pitch and pebble joints, by H. Gore & Co. The old pavement was removed and roadway excavated by the Street Department; edgestones were reset and brick sidewalks and flagging crosswalks relaid by H. Gore & Co. The Boston Elevated Railway Company, by agreement, paid for the portion within its tracks. Former pavement was old granite blocks on gravel base, with gravel joints.

Shawmut avenue, Tremont street to Pleasant street, including the tracks of the Boston Elevated Railway Company, was paved with "Philadelphia" size granite blocks on a 6-inch American cement concrete base, with pitch and pebble joints,

and also temporarily with gravel joints. The old pavement was removed and roadway excavated by the Street Department, concrete base was laid by Perrin & Carter; roadway paving was laid, edgestones reset, brick sidewalks and flagging crosswalks laid by H. Gore & Co. The Boston Elevated Railway Company, by agreement, paid for the portion within its tracks. Former pavement was old granite blocks on a gravel base, with gravel joints.

Tremont street, Boylston street to Pleasant street, including the tracks of the Boston Elevated Railway Company, was paved with "Philadelphia" size blocks on a 6-inch American cement concrete base with pitch and pebble joints. The old pavement was removed and roadway excavated by the Street Department; concrete base was laid by Perrin & Carter, roadway paving was laid, edgestones set, brick sidewalks and flagging crosswalks laid by H. Gore & Co. The Boston Elevated Railway Company by agreement, paid for the portion within its tracks. Former pavement was old granite blocks on a gravel base with gravel joints. Two new catch-basins were built.

Tremont street, Weston street to Hammond street, was paved with large granite blocks on a gravel base with gravel joints. The old pavement was removed and roadway excavated by the Street Department; roadway paving was laid, edgestones set, brick sidewalks and flagging crosswalks laid by James Doherty & Co. Former pavement was old granite blocks on gravel base with gravel joints.

West Broadway, from 257 feet east of the easterly line of F street to near Dorchester street, including the portion of the Boston Elevated Railway tracks in front of the waiting room, was paved with 2½-inches of Sicilian rock asphalt on a 6-inch American cement concrete base by the Boston Asphalt Company. The old pavement was removed and roadway excavated, edgestones set, brick sidewalks and flagging crosswalks laid by H. Gore & Co. The Boston Elevated Railway Company by agreement, paid for the portion within its tracks. Former pavement was old granite blocks on a gravel base with gravel joints.

NEW STREETS.

The following streets were constructed under chapter 323 of the Acts of 1891, and acts in amendment thereof or in addition thereto:

Belmore terrace, Boylston street to Boylston terrace, is about 301 feet long. The contract for constructing the surface of this street was awarded to Patrick O'Hara & Co. Work under this contract was begun April 27, 1898, and completed August 3, 1898, at a total cost of \$1,993.09. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and straight edgestones were furnished by the city and hauled to the site of the work by the contractor. Circular edgestone was furnished on the work by the city; flagging for crosswalks was furnished by the contractors.

Bernard street, Harvard street to Talbot avenue, is about 1,406 feet long. The contract for constructing the surface of the street was awarded to John A. Whittemore's Sons. Work under this contract was begun April 21, 1898, and completed August 9, 1898, at a total cost of \$3,207.98. It is a 6-inch macadam road with crushed stone sidewalks, in part. Crushed stone and edgestones were furnished by the city and hauled to the site of the work by the contractor. Gutter blocks were furnished on the work by the city; flagging for crosswalks was furnished by the contractor. Artificial stone sidewalks (4 feet wide) were laid by W. A. Murtfeldt Company on the easterly side between Park street and Talbot avenue, and on the westerly side from Kerwin street to beyond Helen street, a total length of 806 feet.

Burt street, Washington street to Ashmont street, is about 1,365 feet long. The contract for constructing the surface of this street was awarded to Collins & Ham. Work under this contract was begun August 17, 1898, and suspended December 4, 1898.

Canal street, Haymarket square to Causeway street, is about 1,097 feet long. The contract for constructing the surface of the street was awarded to Jones & Meehan. Work under this contract was begun October 15, 1898, and suspended December 24, 1898.

Carlos street, Lauriat avenue to Chapman avenue, is about 300 feet long. The contract for constructing the surface of the street was awarded to Patrick O'Hara & Co. Work under this contract was begun July 5, 1898, and completed September 1, 1898, at a total cost of \$788.38. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, gutter blocks and edgestones were furnished by the city and hauled to the site of the work by the contractors. Flagging for crosswalks was furnished by the contractors.

Chamblet street, Hartford street to Magnolia street, is about 446 feet long. The contract for constructing the surface of the street was awarded to John Connors. Work under this contract was begun April 27, 1898, and completed May 23, 1898, at a total cost of \$1,142.13. It is a 6-inch macadam road with artificial stone sidewalks (cost of sidewalks not included in the above cost). Crushed stone, gutter blocks and edgestones were furnished by the city and hauled to the site of the work by the contractor. Flagging for crosswalks was furnished by the contractor. Artificial stone sidewalks were laid by W. A. Murtfeldt Company.

Elizabeth street, Norfolk street to Astoria street, is about 264 feet long. The contract for constructing the surface of the street was awarded to Collins & Ham. Work under this contract was begun June 30, 1898, and completed August 18, 1898, at a total cost of \$649.82. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone and edgestones were furnished by the city and hauled to the site of the work by the contractor. Gutter blocks were furnished on the work by the city, and flagging crosswalks were furnished by the contractor.

Fairmount street, Morton street to Washington street, is about 2,657 feet long. The contract for constructing the surface of the street was awarded to James McGovern. Work under this contract was begun November 16, 1897, and completed October 27, 1898, at a total cost of \$7,084.51. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone and edgestones were furnished by the city and hauled to the site of the work by the contractor; gutter blocks were furnished on the work by the city and flagging crosswalks were furnished by the contractor.

Hamilton street, Bowdoin street to Homes avenue, is about 944 feet long. The contract for constructing the surface of the street was awarded to James McGovern. Work under this contract was begun October 26, 1898, and suspended December 13, 1898.

Harold street, Munroe street to Walnut avenue, is about 748 feet long. A contract for constructing the surface of the street was awarded to Patrick McGovern. Work under this contract was begun November 21, 1898, and suspended December 1, 1898.

Hewins street, Columbia road to Erie street, is about 701 feet long. The contract for constructing the surface of the street was awarded to Philip Doherty. Work under this contract was begun September 13, 1898, and suspended November 30, 1898.

Jersey street, Brookline avenue to Audubon road, is about 1,782 feet long. A contract for filling this street to sub-grade was made with the Boston & Albany Railroad Company on August 24, 1898, at the rate of 51 cents per cubic yard, measured in the bank. Work was begun under this contract September 22, 1898, and completed December 17, 1898. Total amount of filling deposited was 36,897 cubic yards, at 51 cents per cubic yard, equal to \$18,817.47. The contract for constructing the surface of the street has not been let.

Leedsville street, Adams street to Dorchester avenue, is about 564 feet long. The contract for constructing the surface of the street was awarded to Collins & Ham. Work was begun under this contract July 13, 1898, and completed September 2, 1898, at a total cost of \$1,705.19. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the site of the work by the contractors. Flagging for crosswalks was furnished by the contractors.

Leroy street, Geneva avenue to Ditson street, is about 717 feet long. The contract for constructing the surface of the street was awarded to Philip Doherty. Work was begun under this contract June 22, 1898, and completed August 4, 1898, at a total cost of \$941.39, not including sidewalks. It is a 6-inch macadam road with artificial stone sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the site of the work by the contractor. Flagging for crosswalks was furnished by the contractor. Artificial stone sidewalks were laid by the Barnes Ruffin Company.

Lonsdale street, Dorchester avenue to Adams street, is about 1,626 feet long. The contract for constructing the surface of this street was awarded to Patrick O'Hara & Co. Work was begun under this contract August 23, 1898, and on September 30, 1898, P. O'Hara & Co. were notified that the city would complete the work on account of the contractors not carrying on the work in a satisfactory manner. A contract was then made with the Barnes Ruffin Company. Work was begun again October 10, 1898, and suspended December 28, 1898.

Malvern street, Brighton avenue to Ashford street, is about 702 feet long. The contract for constructing the surface of this street was awarded to James Doherty & Co. Work under this contract was begun July 8, 1898, and completed September 26, 1898, at a total cost of \$1,691.21. It is a 6-inch macadam road with crushed stone sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the site of the work by the contractor; flagging for crosswalks was furnished by the contractor.

Maryland street, Savin Hill avenue to Bay street, is about 474 feet long. The contract for constructing the surface of this street was awarded to Philip Doherty. Work under this contract was begun October 18, 1898, and suspended November 30, 1898.

Mellen street, Ocean street to Montague street, is about 759 feet long. The contract for constructing the surface of the street was awarded to Collins & Ham. Work was begun under this contract September 13, 1898, and completed November 28, 1898, at a total cost of \$2,421.59. It is a 6-inch macadam road with artificial stone sidewalks, 4 feet in width and a planting space for grass between the sidewalk and the edgestone. Crushed stone and edgestones were furnished by the city and hauled to the site of the work by the contractor; flagging for crosswalks was furnished by the contractor.

Merlin street, Athelwold street to Park street, is about 465 feet long. The contract for constructing the surface of the street was awarded to Patrick McGovern. Work was begun under this contract September 15, 1898, and completed November 28, 1898, at a total cost of \$1,794.97. It is a 6-inch macadam road with artificial stone sidewalks. Crushed stone and edgestone were furnished by the city and hauled to the site of the work by the contractor, gutter blocks were furnished on the work by the city; flagging for crosswalks was furnished by the contractor.

Nightingale street, Talbot avenue to Bernard street, is about 1,454 feet long. The contract for constructing the surface of this street was awarded to James Doherty & Co. Work was begun under this contract August 29, 1898, and completed December 13, 1898, at a total cost of \$3,679.46, not including cost of artificial stone sidewalks. It is a 6-inch macadam road with crushed stone and artificial stone sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the site of the work by the contractor. Flagging for

crosswalks was furnished by the contractor. Artificial stone sidewalks were laid by Simpson Brothers' Corporation.

North Harvard street, Western avenue to Charles river, is about 2,573 feet long. The contract for constructing this street was awarded to Geo. H Wentworth & Co. Work was begun under this contract October 4, 1898, and suspended December 24, 1898.

Oakley street, Bowdoin street to Geneva avenue, is about 825 feet long. The contract for constructing the surface of this street was awarded to John Connors. Work was begun under this contract July 11, 1898, and completed August 23, 1898, at a total cost of \$1,327.01, not including the cost of artificial stone sidewalks. It is a six-inch macadam road with artificial stone sidewalks. Crushed stone, edgestone and gutter blocks were furnished by the city, and hauled to the site of the work by the contractor; flagging for crosswalks was furnished by contractor; artificial stone sidewalks were laid by John C. Newborg.

Peverell street, Sawyer avenue to Salcombe street, is about 486 feet long. The contract for constructing the surface of this street was awarded to Collins & Ham. Work was begun under this contract August 25, 1898, and suspended December 20, 1898.

Rosseter street, Bullard street to Bowdoin avenue, is about 849 feet long. A contract for constructing the surface of this street was awarded to Patrick O'Hara & Co. Work was begun under this contract June 14, 1898, and completed August 23, 1898, at a total cost of \$1,917.80. It is a six-inch macadam road with crushed stone sidewalks. Crushed stone, straight edgestone and gutter blocks were furnished by the city and hauled to the site of the work by the contractor; circular edgestone were furnished by the city on the work; flagging for crosswalks was furnished by the contractor. A contract for building retaining walls at estates of T. H. Badlam and F. E. Brown was awarded to R. L. Barrett for the sum of \$1,275. Work was begun under this contract October 25, 1898, and suspended December 1, 1898.

Ruggles street, Parker street to Back Bay Fens, is about 945 feet long. A contract for constructing the surface of this street was awarded to Doherty & Connors. Work was begun under this contract December 2, 1897, and completed August 6, 1898, at a total cost of \$5,420.99. It is a Telford macadam road (8 inches and 4 inches respectively) with crushed stone sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the site of the work by the contractor; flagging for crosswalks was furnished by the contractor.

St. Stephen street, St. Stephen street to Bryant street, is about 803 feet long. A contract for filling this street to sub-grade was awarded to James T. Gilligan; 5,381 cubic yards were deposited at 20 cents per cubic yard, equal to \$1,076.20. The contract for constructing the surface of the street has not been et.

Spencer street, Wheatland avenue to Talbot avenue, is about 625 feet long. A contract for constructing the surface of the street was awarded to James McGovern. Work under this contract was begun November 20, 1898, and suspended December 14, 1898.

Stuart street, Trinity place to Dartmouth street, is about 260 feet long. A contract for constructing the surface of this street was awarded to Collins & Ham. Work was begun under this contract October 7, 1898, and completed October 31, 1898, at a total cost of \$767.02. It is a six-inch macadam road with brick sidewalks. Crushed stone, edgestone and gutter blocks were furnished by the city and hauled to the site of the work by the contractor; bricks for sidewalks were furnished on the work by the city; flagging for crosswalks was furnished by the contractor.

Telford street, Western avenue to Metropolitan Park Reservation, is about 349 feet long. A contract for constructing the surface of this street was awarded to James Doherty & Co. Work was begun under this contract August 9, 1898, and completed August 29, 1898, at a total cost of \$568.95. It is a six-inch macadam road with crushed stone sidewalks. Crushed stone, edgestone and gutter blocks were furnished by the city and hauled to the site of the work by the contractor; flagging for crosswalks was furnished by the contractor.

Tonawanda street, Geneva avenue to Greenbrier street, is about 1,700 feet long. A contract for constructing the surface of this street was awarded to Philip Doherty. Work was begun under this contract October 11, 1897, and completed June 18, 1898, at a total cost of \$5,294.52. It is a six-inch macadam road with brick sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the site of the work by the contractor; bricks for sidewalks were furnished on the work by the city, flagging for crosswalks was furnished by the contractor.

Vancouver street, Huntington avenue to Ruggles street, is about 254 feet long. A contract for constructing the surface of this street was awarded to Doherty & Connors. Work was begun under this contract December 2, 1897, and completed August 6, 1898, at a total cost of \$1,646.84. It is a Telford macadam road (8 and 4 inches respectively) with crushed stone sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the site of the work by the contractor; flagging for crosswalks was furnished by the contractor.

Waterlow street, Harvard to Harvard street, is about 518 feet long. A contract for constructing the surface of the street was awarded to James Doherty & Co. Work was begun under this contract October 4, 1898, and completed November 28, 1898, at a total cost of \$1,200.46, not including the cost of artificial stone sidewalks. It is a six-inch macadam road with crushed stone and artificial stone sidewalks. Crushed stone, edgestones and gutter blocks were furnished by the city and hauled to the

site of the work by the contractor; flagging for crosswalks was furnished by the contractor. The artificial stone sidewalks have not been laid.

Public alley, No. 437, Arlington street to Berkeley street, between Commonwealth avenue and Newbury street, is about 596 feet long. A contract for constructing the surface of this alley was awarded to the Barber Asphalt Paving Company. Work under this contract was begun October 24, 1898, and completed December 16, 1898, at a total cost of \$2,063.89. The roadway is paved with Trinidad lake asphalt $1\frac{1}{2}$ inches thick, with a bituminous concrete binder $1\frac{1}{2}$ inches thick, on a 6-inch American cement concrete base. The existing pavement (old cobble stone) was removed and roadway excavated, edgestones reset and brick sidewalks laid by the contractor. All new bricks and edgestones required were furnished by the city.

Contracts were awarded on the following streets, but at the end of the season no work had been done:

Angell street, Blue Hill avenue to Canterbury street.

Astor street, Massachusetts avenue to Parker street, now Hemenway street.

Fowler street, Greenwood street to Glenway street.

Francis street, Huntington avenue to Brookline avenue.

Middleton street, Norfolk street northerly.

Wensley street, Heath street westerly.

Plans have been prepared of the following "new streets" on which the work of construction has not been commenced:

Alexander street, Alexander street to Oleander street.

Amory street, School street to Bragdon street.

Atherstone street, Fuller street to Bailey street.

Belvidere street, Dalton street to West Newton street.

Bragdon street, Columbus avenue to Amory street.

Chiswick road, Englewood avenue to Chestnut Hill avenue.

Devon street, Blue Hill avenue to Columbia road.

Forest Hill street, Washington street to Glen road.

Homes avenue, Bowdoin street to Topliff street.

Idaho street, from River street.

Ipswich street, Boylston road to Boylston street.

Leeds street, Woodward street to Dorchester avenue.

Millet street, Park street to Athelwold street.

Newburg street, Beech street to Belgrade avenue.

Orkney road, Strathmore road to Sunderland road.

Peterborough street, Boylston road to Audubon road.

Queensberry street, Audubon road to Audubon road.

St. Stephen street, St. Stephen street to Bryant street.

Shirley street, Norfolk avenue to Massachusetts avenue.

Spencer street, Wheatland avenue to Talbot avenue.

Spring street, Centre street to Gardner street.

Stanley street, Quincy street to Bellevue street.

Thane street, Park street to Athelwold street.

Van Winkle street, Dorchester avenue to Shawmut branch railroad.

West Selden street, from Morton street.

Woodlawn street, Hyde Park avenue to Forest Hills cemetery.

GRADING STREET RAILWAY TRACKS.

The grades for tracks in the following streets have been determined. On streets marked ** the surveys were made and levels taken by the companies :

(Boston Elevated Railway Company.)

Alford street, Main street to Malden bridge.

Atlantic avenue, Summer street to Kneeland street.

Brattle street, Court street to Washington street.

Brighton street, Lowell street to Leverett street.

Bunker Hill street, Chelsea street to Sackville street.

Canal street, Haymarket square to Causeway street.

Columbus avenue, at Centre street.

Dorchester avenue, Summer street to Fort Point channel.

Hanover street, Court street to Washington street.

Main street, Mead street to Mystic branch railroad.

Neponset avenue, Minot street to Taylor street.

Shawmut avenue, Cherry street to near Castle street.

Shawmut avenue, Tremont street to Pleasant street.

Summer street, Atlantic avenue to Dorchester avenue.

Washington street, at Columbia road.

(West Roxbury and Roslindale Street Railway Company.)

Spring street, Centre street to Gardner street.

(Newtonville and Watertown Street Railway Company.)

** **North Beacon street**, Union square to Charles river.

Total length of single track grades 6.9 miles.

Surveys and plans were made for work upon the following streets and grades and lines given. The work of construction was supervised by the Street Department :

Adams street, Park street to Parkman street.

Alford street, Main street to Malden bridge.

Commonwealth avenue, at Essex street.

Commonwealth avenue, Warren street to Chestnut Hill avenue.

Covington street, East Eighth street to foot of steps.

Neponset avenue, Minot street to Neponset river.

Washington street, West Walnut park to School street.

DUMPING WHARVES FOR THE SANITARY DIVISION.

Plans and specifications were made for widening and dredging the dock at Fort Hill Wharf and a contract for doing the work was made June 15, 1898, with W. H. Ellis.

The total cost was \$3,376, and the work was completed early in September.

Plans and specifications were made for building a high platform over this dock for the purpose of dumping garbage into scows below. The work was done by W. H. Ellis, for the sum of \$2,843.33, and was completed in October.

Plans and specifications were made for building a platform and incline runway at the Sanitary Wharf on Albany street and the contract for doing the work was awarded to Thomas E. Ruggles on November 30, for the sum of \$5,470. The platform is over the dock, and is to be used for similar purposes to the one at Fort Hill Wharf; this work is not yet completed. Previous to the building of this platform the dock and its entrance were dredged by the Eastern Dredging Company to grade — 7.0 feet city base; the contract price for doing this work was \$1,260.

EAST BOSTON FERRIES.

New drops and tanks. — Plans and specifications were made for building two new drops, and a contract was made September 3, 1898, with John M. Brooks for doing the work for the sum of \$5,775 for each drop. Plans and specifications were also made for building two new tanks for supporting the drop and a contract for doing the work was made with Mr. Brooks for the sum of \$1,875 for each tank. One drop replaced the old northerly drop at the Boston landing of the North Ferry and was open to travel January 14, 1899; the other drop is to replace the old northerly drop at the East Boston landing of the South Ferry and will be thrown open for travel early in February.

BROADWAY BRIDGE OVER FORT POINT CHANNEL.

Plans were made for strengthening portions of the draw fender pier of this bridge; the work was done by the Street Department.

COTTAGE FARM BRIDGE OVER BOSTON & ALBANY RAILROAD.

A granolithic sidewalk has been built on the northerly side of this bridge, the concrete foundation of which was furnished by the Metropolitan Construction Company, and the granolithic surface was laid by Simpson Brothers. Iron fences, furnished and set by P. J. Dinn & Co., have been placed on the main girders of the bridge.

HARVARD-STREET BRIDGE OVER NEW ENGLAND
RAILROAD.

Plans were prepared for building an 8-foot sidewalk for this bridge, and the work was done by the Street Department.

NORTH END PAVING WHARF.

A plan was made for an extension of this wharf to the harbor line ; this work has not yet been done.

WARREN BRIDGE.

Plans were made for a temporary platform to be used for dumping snow; it has not been built.

Respectfully submitted,

WILLIAM JACKSON,
City Engineer.

APPENDIX I.

REPORT OF THE CHIEF SMOKE INSPECTOR.

64 PEMBERTON SQUARE, BOSTON, February 1, 1899.BENJ. W. WELLS, ESQ., *Superintendent of Streets* :

DEAR SIR,—I herewith submit a report of the work performed under chapter 389, Acts of 1895, chapter 175, Acts of 1897, and section 99, chapter 47, Revised Ordinances 1898, relative to the smoke nuisance in this city.

During the past year the coal market has been in a somewhat unsettled condition, due to various causes, and notwithstanding the fact that large quantities of low grade bituminous coals were used from time to time, considerable success was met with in the abatement of the smoke nuisance under the present statute law.

This has been accomplished, not alone by the rigid enforcement of the ordinance relating to the equipment of new boilers, but by the activity on the part of the observers in reporting chimneys emitting smoke from time to time, not always in violation of the law, but sufficient to warrant the owner's attention being called to it. These reports or complaints when investigated were found in many cases to be due to the coal, while others were due to carelessness on the part of those in charge. While we have been obliged at times to treat owners of steam plants with considerable leniency, they have always shown a willingness to co-operate with the department in the abatement of the nuisance.

The result of these complaints from the observers also show that the smoke nuisance to-day is enlisting the attention of steam users to such an extent that many of them keep better informed of the condition of their chimney, as from time to time I found the object of my visit already occupying their attention.

Since August, 1894, the department in co-operation with the Building Department has been enforcing section 99, chapter 3, Revised Ordinances 1892 (section 99, chapter 47, Revised Ordinances 1898), whereby all boilers using

bituminous coal for the purpose of generating steam must be provided with a smoke consuming device. The legality of the ordinance was tested before the Board of Appeal in September, 1897, since which time it has been embodied in the application for a permit. During the past year there have been received from the office of the Building Commissioner, 385 notices of applications, 330 agreeing to burn hard coal and 33 adopting the use of smoke consuming devices. A record is made of every application, giving street and number, and kind of fuel or device used. At the close of this year 1,352 applications have been acted upon, and 1,134 applicants have signed to burn smokeless fuel.

Previous to August, 1894, boilers had been installed in buildings for heating purposes, equipped with grates to burn hard coal, but after a time bituminous coal was adopted, thus creating a smoke nuisance. Since the enforcement of this ordinance these conditions have been changed, so that to-day they do not practically exist, as frequent visits are made to plants where it is possible to burn soft coal. Since October, 136 boiler plants which are operated only during the cold weather were visited, and several cases were found violating the conditions of their permit, but their attention being called to it, they immediately complied with the requirements of the ordinance.

As the majority of these boilers are so constructed that they cannot be equipped with the smoke consuming devices at present in use in this city, they will be obliged to continue the use of smokeless fuels, which will provide against any future smoke nuisances from this class of boilers.

Sixteen complaints were received and satisfactorily adjusted, as shown in reports on file.

One hundred and seventy-one short observations of one and two firings, and thirty-five long observations lasting from two to nine hours were taken on various chimneys throughout the city; eleven of these latter observations were made at the request of owners of steam plants, who having equipped their boiler or boilers with a smoke consuming device desired the city to inform them if the same was acceptable and complying with the law; these tests take from five to seven days to complete, reports of which are on file.

The importations of Nova Scotia coal recorded at the port of Boston for the year ending January 31, 1899, shows 20,247 tons as against 41,730 tons for the year ending January 31, 1898, very little, if any, of which was used within the city limits.

A weekly weather record of the temperature, humidity,

character of the day, direction and miles per hour of the wind, and also the general precipitation, showing the nature of the same, when it began and ended, is compiled at this office, and a copy of the same is filed at the Central Office.

COAL IMPORTATIONS.

The following table shows the number of tons and value of importations of Nova Scotia coal by months, recorded at the port of Boston for the year ending January 31, 1899:

MONTH.	Tons.	Value.
February.....	365	\$365
March.....	1,178	1,178
April.....	2,316	2,316
May.....	1,150	1,150
June.....	1,004	1,004
July.....	2,412	2,412
August.....	—	—
September.....	2,470	2,470
October.....	—	—
November.....	2,339	2,339
December.....	1,113	1,113
January, 1899.....	5,900	8,863
Total.....	20,247	\$23,210

BOILER APPLICATIONS.

During the past year 385 applications for permits were received from the Building Department, and disposed of as follows:

Signed to use hard coal	330
Adopted smoke devices	33
Gas engines	9
Duplicates	6
Applications withdrawn	3
Soft coal and screenings	2
Soft coal and shavings	1
Dynamo	1
	385

SPECIAL REPORTS.

March 4. Report with observations on chimney connected with the boiler plant of the Converse Building, 101 Milk street.

March 12. Report on complaint against the chimneys connected with the boiler plant of the Shoe and Leather Building and the Church Green Electric Lighting Company, 114 and 140 Bedford street, respectively.

March 15. Report on complaint against chimney connected with the boiler plant of the estate of Mr. N. P. Hamlen, 187-191 Huntington avenue.

March 15. Report on complaint against chimney connected with the boiler plant of the estate, 77 Milk street.

March 21. Report with observations on chimney connected with the boiler plant of the Saranae Building, 607-627 Columbus avenue.

March 21. Report with observations on chimney connected with the boiler plant of the Puritan Brewery, Roland street, Charlestown.

March 22. Report on complaint against chimney connected with the boiler plant of the Church Green Electric Lighting Company, Sullivan place.

March 25. Report on violation of an agreement made by the Block Plant Electric Light Company, relative to operation of boiler at 28 School street.

March 31. Report on complaint of Mrs. M. E. Whitton, 5 Boylston place.

April 25. Report on complaint of tenants of the Smith Building, Court square.

May 5. Report with observations on chimney connected with the boiler plant of the Wentworth Building, Atlantic avenue, Summer and Purchase streets.

June 1. Report on Block Plant Electric Light Company, 28 School street.

June 21. Report on communication of Councilman Louis T. Howard, relative to a smoke nuisance at power house of the Boston Elevated Railway, Freeport street, Dorchester.

July 12. Report on complaint against chimney connected with the boiler plant of the Boston Elevated Railway, Freeport street, Dorchester.

July 12. Report on complaint against chimney connected with the boiler plant of the Jefferson Building, 564 Washington street.

August 24. Report with observations on chimney connected with the boiler plant of the Superior Fast Black and Chemical Company, Roland street, Charlestown.

August 24. Report on complaint against chimney connected with restaurant, 659 Washington street.

August 25. Report on complaint against chimney connected with the boiler plant of the Continental Clothing Company, 651 Washington st.

September 22. Report on complaint against the chimneys connected with the boiler plants of D. S. McDonald Company, and Shepard, Norwell & Co., Winter street.

September 22. Report on complaint against chimney connected with the boiler plant of A. Mudge & Son, 24 Franklin street.

September 23. Report on complaint against chimneys connected with the bake ovens of Mr. Joseph Merello, 1260 Washington street.

September 23. Report on request of Mr. J. N. Pratt of the Jarvis Engineering Company.

October 14. Report on complaint against chimney connected with the boiler plant of the Continental Clothing Company, 651 Washington street.

October 20. Report on complaint against chimney connected with the boiler plant of the Moses Williams estate, 1 Bath street.

November 17. Report on complaint against chimney connected with the boiler plant of the estate of Mr. N. P. Hamlen, 187-191 Huntington avenue.

Jan. 10, 1899. Report with observations on chimney connected with the boiler plant of the Edison Electric Illuminating Company, Head place.

SUMMARY.

The following is a brief summary of the work for the year ending January 31, 1899:

Number of boiler permits acted upon	385
Number of short observations taken	171
Number of observations lasting from two to nine hours	35
Number of special reports made	26
Number of complaints received	16
Number of special requests for observations	11

Respectfully submitted,

THOMAS F. KELLEY,

Chief Inspector.

APPENDIX J.

REPORT OF THE CIVIL SERVICE CLERK.

BOSTON, February 1, 1899.

MR. BENJ. W. WELLS,

Superintendent of Streets :

DEAR SIR, — I herewith respectfully submit a report of the work performed by me in connection with the Civil Service Commission of Massachusetts, together with a statement of the force employed and eligible for employment for the year ending January 28, 1899.

During the year 82 applications were made upon the State Commission for 222 men of various grades and occupations ; of this number 11 were for promotions and 4 were for the reinstatement of 4 men. 336 names were submitted, of which number 239 were selected and appointed, of whom 5 were chosen under the Veteran's Preference Act of 1896, and 42 provisional appointments were made under Civil Service Rule No. 36. Of the 11 applications made for promotions 10 were granted, 1 failing to pass the examination, and on the 4 requests for the reinstatement of 4 employees, 3 were granted and 1 rejected.

During the year 101 transfers were made, which the Commission approved, of which number 30 were from Transit, 8 from Water, 9 from Public Grounds, 28 from Park, 1 from Improved Sewerage, 23 from Public Buildings, Repairs Division, 1 from City Engineer, and 1 from Metropolitan Water Board.

Notices of 203 discharges from the Department rolls were forwarded to the Commission.

The Department records show that there are now 3,473 persons eligible for employment in the several divisions and of that number 3,208 were upon the January, 1899, pay rolls.

Grade and Number of Employees.

TITLE.	DIVISIONS.								Total.
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Street Watering.	
Superintendent.....	1								1
Deputies		1	1	1	1	1	1	1	7
Purchasing Agent.....	1								1
Clerks.....	1	5	25	5	1	3	2		42
Messengers	1	12	7	7	5	2	6	1	41
Civil Engineers.....		2	17						19
Draughtsmen			22						22
Instrumentmen		11	16						27
Rodmen		13	57						70
Aids or tallymen.....		3		4	1			19	29
Inspectors ..		27	57	18				1	103
Foremen		10	10	6	8	1	1		36
Sub-Foremen		24	10	10	14	1	2		61
Superintendent of Inspectors, ...		1	1						2
Blacksmiths and assistants....		19	3	6	5	2			35
Boiler-makers.....						1			1
Bracers and assistants.....			28						28
Boys	1	17	42		10	1	6	1	78
Broom-makers.....		1			3				4
Brick-slinger			1						1
Bridge-cleaners.....							1		1
Captains.....				1		11			12
Carpenters and assistants....		26	9		2	4	11		52
Caulkers							1		1
Concrete-washer.....			1						1
Coal-passers			4						4
Chief of draws and bridges...							1		1
Cooper					1				1
Chief drawtender							1		1
Drawtenders.....							17		17
Assistant drawtenders.....							39		39
Deck hands.....						22			22
<i>Carried forward.....</i>	5	174	311	58	51	49	89	23	760

Grade and Number of Employees. — *Continued.*

TITLE.	DIVISIONS.								Total.
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Street Watering.	
<i>Brought forward</i>	5	174	311	58	51	49	89	23	760
Dumpers.....				24	8				32
Chief engineer (steam).....			1			1			2
Engineer and assistants.....		22	35			12	15		84
Farmer		1							1
Feeders				4	2				6
Firemen			7			18			25
Gatemen			4			12			16
Harness makers and assistants.....		3	1	4	1				9
Horseshoers				7					7
Hostlers.....			3				2		5
Iron-workers			1						1
Janitors.....			1			9			10
Janitresses						5			5
Joiners.....						4			4
Laborers and helpers.....		514	537	208	233	8			1,500
Lamplighters						2			2
Ledgemen		1	85						86
Machinists.....			3			3			6
Mariner.....		1							1
Masons (stone and brick)			51						51
“ tenders.....			11						11
Mate			1						1
Measurers		2					1		3
Oilers			9			2			11
Pavers and assistants		33							33
Painters				8		1	10		19
Pilots			1			10			11
Pipe-layers			6						6
Powdermen.....		4							4
Riggers			1						1
Sailors			2						2
Scowmen									
Stone-pointer			1						1
<i>Carried forward</i>	5	755	1,072	313	295	136	117	23	2,716

Grade and Number of Employees. — Concluded.

TITLE.	DIVISIONS.								Total.
	Central Office.	Paving.	Sewer.	Sanitary.	Street Cleaning.	Ferry.	Bridge.	Street Watering.	
<i>Brought forward</i>	5	755	1,072	313	295	136	117	23	2,716
Steam drillers		8							8
Stenographers	1	1							2
Stonecutters		24	2						26
Store-keepers			1			1			2
Stablemen		13	2	10	4				29
Teamsters		81	8	175	58		2		324
Tollmen						11			11
Watchmen		19	12	7	1	7	3		49
Weighers		6	2						8
Wharfingers and assistants		4	1						5
Wheelwrights				5					5
Yardmen		8	2	10	3				23
Total	6	919	1,102	520	361	155	122	23	3,208

Table showing Transfers made from various City Departments to the Several Divisions.

DIVISIONS.	DEPARTMENTS.								Total.
	Transit.	Water.	Public Grounds.	Park.	Improved Sewerage.	Public Buildings, Repairs Division.	City Engineer.	Metropolitan Water Board.	
Paving		2		4		1			7
Sewer	28	6	6	17	1	15	1	1	75
Sanitary				3		4			7
Street Cleaning	1		3	3		3			10
Ferry									
Bridge	1			1					2
Street Watering									
Central Office									
Total	30	8	9	28	1	23	1	1	101

Table showing the number of Applications for Various Grades of men made upon the Civil Service Commission for the Year ending January 31, 1898.

DIVISIONS.	Applications.	Number applied for.	Number submitted by C. S. C.	Number appointed.	Provisional appointment included in four previous columns.	Reinstatements included in four previous columns.	Veterans appointed included in four previous columns.
Paving	12	37	46	37	4	2	.....
Sewer	42	125	190	139	38	2	2
Sanitary.....	12	19	37	15	.....	.....	.....
Street Cleaning,	8	12	20	13	.....	.....	1
Ferry.....	1	15	16	15	.....	.....	.....
Bridge.....	4	4	7	4	.....	.....	2
Street Watering,	3	10	20	16	.....	.....	.....
Central Office ..	.....	.....	.....	.....	.....	.....	.....
Total	82	222	336	239	42	4	5

Applications included eleven, who were promoted. One applicant for promotion failed. Twenty-nine requisitions cancelled not included in above, four of which were for transfers from other city departments.

Four applications for reinstatement; of four men, one refused by Civil Service Commission.

Five veterans were appointed: one foreman, three mechanics and laborers, one assistant draw-tender.

Respectfully submitted,

M. J. MURRAY,

Civil Service Clerk.

APPENDIX K.

FORMER SUPERINTENDENTS AND DOCUMENT
NUMBERS OF ANNUAL REPORTS.

Bridge Department before 1891.

Previous to 1886, under charge of City Engineer.

NAME.	Year.
Bartholomew M. Young	1886 to 1889
James H. Nugent	1889 to 1891

Bridge Department before 1891.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report	1886	1887	29
" "	1887	1888	26
" "	1888	1889	29
" "	1889	1890	22
" "	1890	1891	*

* Published in annual report, Executive Department, Part I., City Document No. 1, 1891.

Paving Department before 1891.

NAME.	Year.
Enoch Patterson, Superintendent Streets and Drains .	1827 to 1831
Zephaniah Sampson, " " " " .	1831 to 1846
Thomas Hunting, Superintendent	1846 to 1853
Alfred T. Turner, "	1853 to 1864
Charles Harris, "	1864 to 1883
Nehemiah T. Merritt "	1883
James J. Flynn, "	1883
Charles Harris, "	1884
Michael Meehan, "	1884 to 1886
John W. McDonald, "	1886 to 1889
J. Edwin Jones, "	1889 to 1891

Paving Department before 1891.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Quarterly report	.	1851	6
" "	.	1851	29
Annual report	1851	1852	2
" "	1852	1853	6
" "	1853	1854	6
" "	1854	1855	5
" "	1855	1856	3
" "	1856	1857	3
" "	1857	1858	3
" "	1858	1859	5
" "	1859	1860	6
" "	1860	1861	5
" "	1861	1862	4
" "	1862	1863	3
" "	1863	1864	3
" "	1864	1865	7
" "	1865	1866	3
" "	1866	1867	6
" "	1867	1868	9
" "	1868	1869	14
" "	1869	1870	13
" "	1870	1871	12
" "	1871	1872	16
" "	1872	1873	21
" "	1873	1874	25
" "	1874	1875	27
" "	1875	1876	30
" "	1876	1877	38
" "	1877	1878	29
" "	1878	1879	24
" "	1879	1880	24
" "	1880	1881	48
" "	1881	1882	51
" "	1882	1883	47
" "	1883	1884	46
" "	1884	1885	97
" "	1885	1886	30
" "	1886	1887	16
" "	1887	1888	23
" "	1888	1889	30
" "	1889	1890	19
" "	1890	1891	*

*Published in annual report, Executive Department, Part II., City Document No. 1, 1891.

Sewer Department before 1891.

NAME.	Year.
Enoch Patterson, Superintendent	1827 to 1831
Zephaniah Sampson, "	1831 to 1837
Charles B. Wells, "	1837 to 1856
Simeon B. Smith, "	1856 to 1863
William H. Bradley, "	1863 to 1883
Horace A. Moses, "	1883 to 1885
Thomas J. Young, "	1885 to 1887
Seth Perkins, "	1887 to 1889
Charles Morton, "	1889 to 1891

Sewer Department before 1891.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. Doc.
Annual report	1859	1861	11
" "	1860	1861	12
" "	1861	1862	12
" "	1862	1863	13
" "	1863	1864	11
" "	1864	1865	5
" "	1865	1866	6
" "	1866	1867	8
" "	1867	1868	13
" "	1868	1869	11
" "	1869	1870	3
" "	1870	1871	11
" "	1871	1872	10
" "	1872	1873	13
" "	1873	1874	12
" "	1874	1875	17
" "	1875	1876	11
" "	1876	1877	13
" "	1877	1878	15
" "	1878	1879	11
" "	1879	1880	16
" "	1880	1881	19
" "	1881	1882	18
" "	1882	1883	16
" "	1883	1884	43
" "	1884	1885	
" "	1885	1886	58
" "	1886	1887	69
" "	1887	1888	81
" "	1888	1889	129
" "	1889	1890	14
" "	1890	1891	*

* Published in annual report, Executive Department, Part II., City Document No. 1, 1891.

Health Department before 1891.*Sanitary.*

NAME.	Year.
Ezra Forristall, Superintendent	1853 to 1854
Joseph W. Coburn, "	1854 to 1855
Ezra Forristall, "	1855 to 1869
George W. Forristall, "	1869 to 1890

Health Department before 1891.*Sanitary.*

NAME OF DOCUMENT.	Year.	Pub. Year.	No. of Doc.
Annual report	1853	1854	7
" "	1854	1855	6
" "	1855	1856	4
" "	1856	1857	4
" "	1857	1858	4
" "	1858	1859	4
" "	1859	1860	5
" "	1860	1861	6
" "	1861	1862	5
" "	1862	1863	5
" "	1863	1864	4
" "	1864	1865	4
" "	1865	1866	8
" "	1866	1867	7
" "	1867	1868	8
" "	1868	1869	12
" "	1869	1870	4
" "	1870	1871	10
" "	1871	1872	17
" "	1872	1873	40
Annual report from 1873 to 1884, inclusive; the Superintendent's report was embodied in the report of the Board of Health	1885	1886	45
Annual report	1886	1887	22
" "	1887	1888	16
" "	1888	1889	23
" "	1889	1890	21
" "	1890	1891	*

* Published in annual report, Executive Department, Part II., City Document No. 1, 1891.

Commissioners of Cambridge Bridges before 1891.

(West Boston, Canal and Prison Point.)

NAME.	Year.
Frederick W. Lincoln, Commissioner for Boston,	{ May 22, 1871, to
Ezra Parmenter, Commissioner for Cambridge .	{ March, 1891.
William J. Marvin, Commissioner for Cambridge,	{ June 14, 1871, to
	{ Jan. 31, 1883.
	{ March 28, 1883, to
	{ present time.

NOTE.—Harvard bridge added in 1892. Essex street, Cambridge street, North Harvard street and Western avenue bridges to Cambridge were transferred from Street Department July 1, 1898.

Commissioners of Cambridge Bridges before 1891.

(West Boston, Canal and Prison Point.)

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report	1871	1872	19
" "	1872	1873	12
" "	1873	1874	16
" "	1874	1875	23
" "	1875	1876	20
" "	1876	1877	12
" "	1877	1878	10
" "	1878	1879	8
" "	1879	1880	12
" "	1880	1881	8
" "	1881	1882	15
" "	1882	1883	15
" "	1883	1884	19
" "	1884	1885	8
" "	1885	1886	12
" "	1886	1887	19
" "	1887	1888	25
" "	1888	1889	22
" "	1889	1890	20
" "	1890	1891	*

* Published in annual report, Executive Department, Part I., City Document No. 1, 1891.

Ferry Department before 1895.

NAME.	Year.	
Board of Ferry Directors	1870	1891
William J. Burke, Superintendent	1891	May 1, 1895.
Thomas Kellough	May 1, 1895.	July 1, 1895.

Ferry Department before 1895.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report	1870	1871	41
" "	1871	1872	55
" "	1872	1873	81
" "	1873	1874	42
" "	1874	1875	65
" "	1875	1876	51
" "	1876	1877	53
" "	1877	1878	49
" "	1878	1879	60
" "	1879	1880	74
" "	1880	1881	77
" "	1881	1882	72
" "	1882	1883	93
" "	1883	1884	76
" "	1884	1885	72
" "	1885	1886	28
" "	1886	1887	12
" "	1887	1888	10
" "	1888	1889	3
" "	1889	1890	4
" "	1890	1891	*
" "	1891	1892	12
" "	1892	1893	11
" "	1893	1894	11
" "	1894	1895	11

*Published in annual report, Executive Department, Part I., City Document No. 1, 1891.

Street Department since 1891.

Superintendent.

Henry H. Carter, Member of American Society Civil Engineers.

Resigned December 8, 1894.

Charles R. Cutter, *Acting Superintendent from December 8, 1894, to January 14, 1895.*
Member of the Boston Society Civil Engineers.

Bertrand T. Wheeler, *Superintendent from January 14, 1895, to February 4, 1896.*
Member of the Boston Society Civil Engineers.

Benjamin W. Wells, *Superintendent from February 4, 1896, to the present time.*

BRIDGE DIVISION.—John A. McLaughlin, *Deputy Superintendent until June 1, 1895.*

BRIDGE DIVISION.—John P. Wise, *Deputy Superintendent from June 1, 1895, to February 14, 1896.*

BRIDGE DIVISION.—William H. Carberry, *Deputy Superintendent from February 14, 1896, to the present time.*

FERRY DIVISION.—Thomas Kellough, *Deputy Superintendent from July 1, 1895, to February 14, 1896.*

FERRY DIVISION.—William F. McClellan, *Deputy Superintendent from February 14, 1896, to the present time.*

PAVING DIVISION.—Charles R. Cutter, *Deputy Superintendent until January 24, 1895.*

PAVING DIVISION.—Darius N. Payson, *Deputy Superintendent from January 24, 1895, to March 1, 1896.*

PAVING DIVISION.—John L. Kelly, *Deputy Superintendent from March 1, 1896, to the present time.*

SANITARY DIVISION.—George W. Forristall,¹ *Deputy Superintendent.*

SANITARY DIVISION.—Philip A. Jackson, *Acting Deputy Superintendent from January 16, 1894, to February 1, 1895.*

SANITARY DIVISION.—Charles A. Young, *Deputy Superintendent from February, 1895, to March 1, 1896.*

SANITARY DIVISION.—Patrick O'Shea, *Deputy Superintendent from March 1, 1896, to the present time.*

SEWER DIVISION.—Henry W. Sanborn, *Deputy Superintendent until July 10, 1896.*
Member Philadelphia Society Civil Engineers.

SEWER DIVISION.—Charles R. Cutter, *Deputy Superintendent from July 10, 1896, to the present time.*
Member of the Boston Society of Civil Engineers.

STREET CLEANING DIVISION.—Philip A. Jackson, *Deputy Superintendent until March 22, 1895.*

STREET CLEANING DIVISION.—Benjamin M. Cram, *Deputy Superintendent from March 22, 1895, to March 1, 1896.*

STREET CLEANING DIVISION.—Joshua Atwood, 3d, *Deputy Superintendent from March 1, 1896, to the present time.*
Member of the Boston Society of Civil Engineers.

STREET WATERING DIVISION.—M. Edwin Libby, *Deputy Superintendent from March 6, 1895, to March 1, 1896.*

STREET WATERING DIVISION.—Thomas J. Finneran, *Deputy Superintendent from March 1, 1896, to the present time.*

BOSTON AND CAMBRIDGE BRIDGES.—Henry H. Carter, *ex officio, Commissioner for Boston, until December 8, 1894.*

Charles R. Cutter, *Acting from December 8, 1894, to January 14, 1895.*

Bertrand T. Wheeler, *from January 14, 1895, to February 4, 1896.*

Benjamin W. Wells, *from February 14, 1896, to the present time.*

William J. Marvin, *Commissioner for Cambridge.*

¹ Died January 12, 1894.

Street Department.

NAME OF DOCUMENT.	For Year.	Pub. Year.	No. of Doc.
Annual report, Executive Dept. Part II..	1891	1892	36
“ “ “ “ “ ..	1892	1893	34
“ “ “ “ “ ..	1893	1894	34
“ “ “ “ “ ..	1894	1895	34
“ “ “ “ “ ..	1895	1896	29
“ “ “ “ “ ..	1896	1897	29
“ “ “ “ “ ..	1897	1898	34
“ “ “ “ “ ..	1898	1899	35



ANNUAL REPORT
OF THE
STREET LAYING-OUT DEPARTMENT
FOR THE YEAR 1898.

BOSTON, February 1, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston:

SIR,—The Board of Street Commissioners present the following as the report of the Street Laying-Out Department, including a statement relating to public lands in their care, for the year ending January 31, 1899:

Under the orders for laying out, widening and extending streets passed by the Board during the year, land to the amount of about 595,543 square feet was taken for street purposes; the total estimated damages amounted to \$129,436.75. Streets having a total mileage of 5.63 were made public ways. Under authority of the Act of the Legislature of 1891, for the assessment upon abutting property of the cost of laying out and constructing streets, there has been assessed, upon five streets, a total of \$60,367.69.

The Board has issued eighty-nine orders of notice of intention to lay out, widen, extend and discontinue streets, or parts of streets, calling for public hearings. It has received and considered seventy petitions for street improvements, and for hearings in the matter of the payment for damages occasioned by street improvements twenty-one petitions. Upon petitions in the matter of payment for damages eighteen

hearings have been given and ninety-four settlements reached. Seven petitions for release of sewer assessments have been received, and six releases made by the Board, under authority of the act empowering them to release parts of estates from assessments for sewers and sidewalks upon payment of the proportional parts due upon the parcels released.

Under authority of chapter 426 of the Acts of the Legislature of 1897 the Street Commissioners have passed orders for the improvement and relocation of various natural streams or water-courses, and have supplied surface drainage for territories needing it as follows: Sections of the water-course in Dorchester, known as Tenean creek or the Smelt brook, have been ordered widened, deepened, paved, covered or relocated between Tremlett street and Stratford street, between King street and Centre street, between Gorham street and Dorchester avenue, from Brent street to Kenwood street, from Park street to the main channel, from Ashmont street to Shelton street; the Canterbury branch of Stony brook, in Dorchester and West Roxbury, has been ordered relocated and improved between Franklin field and the main channel of Stony brook, near Brook street, in West Roxbury, and between Morton street and Middleton street, in Dorchester; the Oakland Garden fork of the Canterbury branch of Stony brook, in Dorchester, has been ordered relocated and improved in Kilton street, between Park street and Harvard street, and between Colonial avenue and Franklin field, including the arm extending to Wheatland avenue; Goldsmith brook, at West Roxbury, between Keyes street and South street; Faneuil Valley brook, at Brighton, between Cephas street and Faneuil street; Freeport street brook, at Dorchester, where it crosses Pleasant street; Shepard brook, at Brighton, between the Wool pond near Goodenough street and Union street; Mattapan brook, at Dorchester, between West Selden street and Blue Hill avenue; Franklin Park brook, at West Roxbury, from Canterbury street to Blue Hill avenue; Sutherland road brook, at Brighton; Salt creek brook, at Brighton, from Commonwealth avenue to and across the main line of the Boston and Albany Railroad, and Davenport brook, between Dorchester avenue and Magdala street, at Dorchester, have been ordered relocated or improved; a surface drain has been ordered to be constructed from Centre street to Montview street, at West Roxbury; at West Selden street, Dorchester, an outlet has been ordered for the sewer and surface drain in that street; a surface drain has been ordered for Spalding street, at West Roxbury; a surface drain has been ordered at Dorchester for Sydney

street, Savin Hill; surface drainage for the locality has been established in a channel connecting Adams street with the Milton branch of the Old Colony Railroad at Dorchester; a surface drain has been ordered built at Homes avenue, Dorchester; an outlet to the intercepting sewer at Neponset river has been ordered in private land between the river and River street for the sewer in Idaho street, Dorchester; a surface drain has been ordered for Kenwood road and Vila street, Roxbury; a storm sewer has been ordered for Ceylon street extension; a surface drain has been ordered constructed at West Roxbury in private land between May street and the Arborway, and an outlet for catch-basins has been ordered for Van Winkle street, Dorchester.

Sewers have been ordered built in the following public streets:

Allston street, Brighton, between Commonwealth avenue and Warren street.

Adams street, Dorchester, from Richmond street.

Adams street, Dorchester, from Hillsdale street.

Adams street, Dorchester, between Mill street and Centre street.

Beech Glen street, Roxbury, between Highland street and Highland Park.

Boylston street, in passageway from.

Butler street, Dorchester, Adams street to Richmond street.

Bowdoin street, Dorchester, Quincy street to Draper street.

Bullock street, South Boston, between C street and D street.

Bullard street, Dorchester, between Rosseter street and Nottingham street.

Brookline avenue, between Muddy river and Kenwood road.

Clinton street, between Commercial street and Fulton street.

Cross street, between Fulton street and Endicott street.

Catherine street, West Roxbury, between Florence street and Bourne street.

Carruth street, Dorchester, from south of Weyanoke street to Shenandoah street.

Cumberland street, in passageway from.

Corey street, West Roxbury, from Henshaw terrace 150 feet northwesterly.

Centre street, Dorchester, between Dorchester avenue and Centre avenue.

Corey street, West Roxbury, between Weld street and Vermont street.

Centre street, West Roxbury, between Bellevue street and Mt. Vernon street.

Centre street, Dorchester, from Adams street.

Dorchester avenue, Dorchester, between Dorr street and Dexter street.

Dexter street, South Boston, between Dorchester avenue and Ellery street.

Dorchester avenue, Dorchester, between Mt. Vernon street and Columbia road.

Dorchester avenue, between Summer street extension and Mt. Washington avenue.

Ditson street, Dorchester, between Josephine street and Charles street.

Dent street, West Roxbury, between Ivory street and Jordan street.

Dorchester avenue, Dorchester, in land between and King street.

Ellery street, South Boston, between Dexter street and Boston street.

Evelyn street, Dorchester, between Norfolk street and Blue Hill avenue.

Eaton square, Dorchester, between Hancock street and Church street.

Fulton street, between Clinton street and Cross street.

Falcon street, East Boston, between Border street and Meridian street.

Hemenway street, Roxbury, between Norway street and Boylston street.

Haskins street, Roxbury.

Hano street, Brighton, between Everett street and Cambridge street.

Hardwick street, Brighton, between Bigelow street and Dunboy street.

Highland street, Roxbury, between Cedar street and Linwood street.

Hopkins street, Dorchester, between Evans street and Corbet street.

Halleck street, Roxbury, between Ruggles street and Ward street.

Ivory street, West Roxbury, between Dent street and Temple street.

Keyes street, West Roxbury, from Washington street 450 feet westerly.

Kilsyth road, Brighton, from Colliston road 75 feet westerly.

Kemp street, South Boston, rebuilding of sewer overflow.

Kilsyth road, Brighton, from junction Kilsyth road and Lanark road to existing sewer.

Kneeland street, between Cove street and South street.

Kinross road, Brighton, between Sutherland road and Commonwealth avenue.

King street, Dorchester, in land between and Dorchester avenue.

Lanark road, Brighton, between Sutherland road and Kinross road.

La Grange street, West Roxbury, between Weld street and Glenham street.

Linden Park street, Roxbury, from Gay street 150 feet northwesterly.

Leicester street, Brighton, between Bennett street and Surrey street.

Morton street, Dorchester, from Sanford street to Oakridge street.

Marginal street, East Boston, from Jeffries street to tide-water.

Mt. Vernon street, West Roxbury, between Alder street and Temple street.

Magnolia street, from Magnolia square 200 feet southerly.

Mill street, Dorchester, from tidewater to Neponset avenue.

Mill street, Dorchester, from Neponset avenue to Adams street.

N street, South Boston, between overflow on Ninth street and tidewater.

Notre Dame street, Roxbury, from present sewer to a passageway.

Norfolk street, Dorchester, between Ballou avenue and Mascot street.

Norfolk street, Dorchester, between Elizabeth street and Evelyn street.

Newark street, Roxbury.

Norfolk street, Dorchester, between Evelyn street and Walk Hill street.

North Harvard street, Brighton, between Cambridge street and Empire street.

Park street, West Roxbury, between Centre street and Montview street.

Parker street, Roxbury, outlet.

Peters street, South Boston.

Q street, South Boston, from Sixth street to tidewater.

Richmond street, Dorchester, between Dorchester avenue and Adams street.

Ruggles street, Roxbury, between New York, New Haven and Hartford Railroad and Halleck street.

Rockville park, Roxbury.

Riverway, between Francis street outlet and Brookline avenue, and between Muddy river and Kenwood road.

Seaver street, Roxbury, between Humboldt avenue and Elm Hill avenue.

Selkirk road, Brighton, between Sutherland road and Chiswick road.

Summer street, between E street and L street bridge.

Shenandoah street, Dorchester, between Carruth street and Wessex street.

Selkirk road, Brighton, between Kilsyth road and Sutherland road.

Southern avenue, Dorchester.

Spring street, West Roxbury, Parental School.

Sedgwick street, to Elm street.

Strathmore road, Brighton, between Englewood avenue and Commonwealth avenue.

Sutherland road, Brighton, between Englewood avenue and Chestnut Hill avenue.

South street, between Kneeland street and Harvard street.

Summer street extension, from Dorchester avenue 100 feet westerly.

Smith street, Roxbury, between Phillips street and St. Alphonsus street.

South street, West Roxbury, 200 feet west from Congreve street.

Savin Hill avenue, Dorchester, between Wesley avenue and Evansdale terrace.

Sumner street, East Boston, between Seaver street and Lamson street.

Saratoga street, East Boston, 250 feet easterly from Austin avenue.

Sparhawk street, Brighton, between Murdock street and Cambridge street.

Temple street, West Roxbury, between Mt. Vernon street and Ivory street.

Townsend street, Roxbury, from Walnut avenue to existing sewer.

West Brookline street, from Washington street to Shawmut avenue.

Walnut avenue, Roxbury, between Harrishof street and Townsend street.

Waumbeck street, Roxbury, from Harold street to near Humboldt avenue.

Warren street, Brighton, from Cambridge street 200 feet easterly.

Walter street, West Roxbury, between Proctor street and Ashfield street.

Walk Hill street, Dorchester, between Norfolk street and Blue Hill avenue.

Walter street, West Roxbury, between Proctor street and Jones street to Mendum street.

Wachusett street, West Roxbury, 300 feet northerly from Walk Hill street.

Walk Hill street, from Blue Hill avenue to 300 feet north of Tileston avenue.

Weld street, West Roxbury, from Metropolitan sewer to Corey street.

In the following private streets or lands sewers for house drainage have been ordered :

Notre Dame street, Benton street, Bray street, Cherokee street, Sonoma street, Kenwood road, Vila street, and in private land from Lamont street, at Roxbury; Florence street, Percy street, St. Mark street, Congreve street, Fletcher street, Farquhar street, Westbourne street, Cypress street, Glenham street, Harwood street, Lasell street, Keith street, Alder street, Dent street, Perham street, Winslow street, Temple street, Harrison street, Rosemary street, private land between Brookside avenue and Argyle street, Jones street, Mendum street, Marmion street, Argyle street, Bellevue avenue and Knoll street, at West Roxbury; Lauriat street, Chapman avenue, Chase street, Torrey street, Wentworth street, Ferndale street, Barry street, Nottingham street, Raven street, Blackwell street, Bowman street, Roland park, Massasoit avenue, Melbourne street, Frost avenue, Whitfield street, Torrey street, Faxon street, Trescott street, Oakridge street, private land between Endleigh and Sydney streets, Endleigh street, passageway from Romsey street, Magnolia square, Harvard avenue, Faxon street, private land between Harvard and Washington streets, Carlisle street, Huntoon street, Grove street and White terrace, at Dorchester; Malvern street, Empire street, Harriet street and private land between Faneuil and Harriet streets, at Brighton; Ipswich street, Fellows street and Fairweather street, city proper; and in a passageway from A street to Sleeper street and thence to Fort Point channel, at South Boston.

September 12, 1898, the sewerage charges, provided for in the Act of 1897, to be paid for the year 1898 by the real

estate in the city for the construction, maintenance and operation of sewerage works therein, were determined by the board to be \$507,103.46, and were committed to the Board of Assessors for collection with the taxes upon said real estate.

The following is a list of the new streets, with their lengths, laid out as public ways during the year, with a statement of the widenings, relocations, extensions and discontinuances of public streets :

BOSTON PROPER.	
STREET.	FEET.
Jersey, from Brookline avenue to Audubon road, laid out	1,631.00
Canal, from Haymarket square to Causeway street, relocated.	
Stuart, from Dartmouth street to Trinity place, laid out	260.00
Charlestown, relocated.	
Trinity place, from St. James avenue to Stuart street, laid out	390.00
Blandford, from Commonwealth avenue to Bos- ton and Albany Railroad, laid out	377.15
Cummington, from Blandford street to Avon street, laid out	1,174.64
	3,832.79
EAST BOSTON.	
Ruth, southeasterly side, northeastwardly from Marginal street, widened.	
Ashley, from Breed street to Walley street, laid out	632.84
SOUTH BOSTON.	
Leeds, from Woodward street to Dorchester avenue, laid out	370.25
ROXBURY.	
Francis, from Huntington avenue to Brookline avenue, relocated.	
Amory, from School street to Bragdon street, relocated.	
Bragdon, from Columbus avenue to Amory street, laid out	608.45
Devon, from Blue Hill avenue to Columbia road, laid out	450.00
<i>Carried forward</i>	1,058.45

STREET.	FEET.
<i>Brought forward</i>	1,058.45
Shirley, from Norfolk avenue (over and including Bartlett court) to Massachusetts avenue, laid out	924.00
West Walnut park, extension to Amory street, laid out	665.49
Ernst, from Bragdon street to West Walnut park, laid out	312.31
Miles, from Bragdon street to West Walnut park, laid out	262.64
Bancroft, from Columbus avenue to West Walnut park, laid out	262.33
Worthington, from Longwood avenue to Fenway, laid out	1,128.00
	4,613.22

DORCHESTER.

Hewins, from Columbia road to Erie street, laid out	700.48
Boston, from Mt. Vernon street to Columbia road, relocated.	
Merlin, from Athelwold street to Park street, laid out	464.90
Spencer, from Wheatland avenue to Talbot avenue, laid out	620.00
Mellen, from Ocean street to Montague street, laid out	761.14
Thane, from Park street to Athelwold street, laid out	465.23
Spencer, from Park street to Athelwold street, laid out	465.65
Millet, from Park street to Athelwold street, laid out	468.40
Stanley, from Quincy street to Bellevue street, laid out	363.00
Middleton, from Norfolk street, laid out	585.88
Devon, from Columbia road to Blue Hill avenue, laid out	1,400.01
Homes avenue, from Bowdoin street to Topliff street, laid out	842.00
Van Winkle, from Dorchester avenue to Shawmut Branch Railroad, laid out	759.62
Atherstone, from Fuller street to Bailey street, laid out	300.00
<i>Carried forward</i>	8,196.31

STREET.	FEET.
<i>Brought forward</i>	8,196.31
Morton, from West Selden street to the New England Railroad, relocated.	
Fowler, from Glenway street to Greenwood street, laid out	855.15
Alexander, extension of southwardly over the private way called Oleander street, laid out	602.00
Callender, from Tucker street to Don street, laid out	2,173.59
Adams, northeasterly side, corner of Park street, widened.	
Woodcliff, eastwardly from Howard ave., laid out,	213.99
Shafter, from Waterlow street to Faxon street, laid out	733.00
Florida, from King street to Templeton street, laid out	1,113.95
	13,887.99

WEST ROXBURY.

Park, from Centre street to Montview street, laid out	1,162.02
Hubbard, from Chestnut avenue to Lamartine street, laid out	434.86
Newburg, from Beech street to Belgrade avenue, laid out	1,976.00
Spring, from Centre street to Gardner street, relocated.	
Forest Hills, from Washington street to Glen road, relocated.	
South street footway, across location of railroad and to Conway street, relocated.	
Angell, from Blue Hill avenue to Canterbury street, laid out	852.60
	4,425.48

BRIGHTON.

Telford, from Western avenue, laid out	349.12
North Harvard, from Western avenue to Charles river, relocated.	
Chester, from Brighton avenue to Commonwealth avenue, laid out	620.49
Orkney road, from Strathmore road to Sutherland road, laid out	819.72
	1,789.33

CHARLESTOWN.

STREET.	FEET.
Hunter, from Bunker Hill street to Vine street, laid out	160.23

RECAPITULATION.

DISTRICT.	FEET.
Boston Proper	3,832.79
East Boston	632.84
South Boston	370.25
Roxbury	4,613.22
Dorchester	13,887.99
West Roxbury	4,425.48
Brighton	1,789.33
Charlestown	160.23
	29,712.13 = 5.63 miles.

The following are estimates made by the Board, of expenses of street improvements, not including cost of construction, ordered in 1898:

Park street, laid out, from Centre street to Montview street, West Roxbury . . .	\$1,761 75
Jersey street, laid out, from Brookline avenue to Audubon road, Boston proper . . .	127,675 00
	\$129,436 75

PUBLIC ALLEYS.

Chapter 298 of the Acts of the Legislature of 1898 provided that the Street Commissioners might, proceeding in the manner prescribed for the laying out of highways in chapter 323 of the Acts of 1891, and in acts in amendment of or addition thereto, lay out and construct any alley or passageway in the city not exceeding twenty-five feet in width as a public alley, and that the provisions of such acts should apply to the laying out and construction of public alleys and the payment of the assessable cost of the same as if they were laid out as highways, and that moneys applicable to the laying out of highways under such acts might be used for the laying out and construction of such public alleys. By the second section of the Public Alleys Act the city is relieved of liability for defect or want of repair in any of them, and of the responsibility of removing snow, but is directed to keep them free from any substance liable to cause sickness, or a nuisance.

Section three makes it an offence punishable by fine for any person to drop or place or suffer to remain in any public alley any snow or ice, or any rubbish or obstruction of any kind.

The deplorable condition into which so many of the back alleys of the city have fallen, and for a long time remained, owing to the neglect or inaction of householders and business people controlling them, has induced those abutting upon such passageways who desire cleanliness and order in their surroundings to hasten to secure the application of the act in various parts of the city. Concerted action by abutters for the repair and cleansing of these private alleys is a thing very difficult to bring about; the number of owners favoring proper and decent maintenance of any of these private ways, if anything is undertaken with a view to their improvement, being left to bear the whole cost by their indifferent or impecunious neighbors. The appearance of these alleys does not seem to vary with localities so much as is the case with the streets in different parts of the city, some of the rear ways in the districts of good classes of residents being left in a state of filth and disorder that is not seen where property is of less value and the population is greater in equal areas. The condition of these alleys relates so closely to the health, convenience and decent living of the citizens that the Street Commissioners believe the use of the Public Alleys Act will be of the greatest value to them and well worth the cost that, in an equitable division among property owners abutting upon these ways, they will be called upon to pay. As the act is intended for alleys, or back passageways, to houses having designatory numbers on the streets they front, and as the rear doors of such houses always carry such street numbers, no additional numbers being needed or wanted for the backs of the houses, it has been found convenient to number, instead of attempting to name the alleys, giving them official standing as "Public Alley No. 10," etc. To avoid high numbering and to in a way mark the locality in which the alleys may be found by officials, conveyancers, etc., the city has been divided into districts. Five of these cover the city proper to Massachusetts avenue. One hundred numbers are given to each district, and as petitions are received numbers within this hundred are given to the passageways mentioned in the petitions in the districts where they are located. The details of these districts are shown on maps of the city in the departments in City Hall concerned with the care of streets, and it is intended to provide one for the Registry of Deeds for the use of conveyancers, etc. This method of designating the alleys the Street Commissioners believe will prove

sufficient for the official use of the departments in searching for liens upon estates created by the laying out of these alleys, and for all descriptive purposes in the writing of deeds and other instruments in real estate transactions.

The passageways laid out as public alleys since the passage of the act included in District No. 5, which is bounded by Charles river, the Public Garden, Boylston street, Berkeley street, the Boston and Providence Railroad, and Massachusetts avenue, are the series leading from Arlington street to Massachusetts avenue, between Beacon street and Marlborough street; the series, also from Arlington street to Massachusetts avenue, between Commonwealth avenue and Newbury street; and the passageways from Irvington street to the rear of estates on the northeast side of Massachusetts avenue, between Huntington avenue and St. Botolph street, with the cross passageway running from Huntington avenue to St. Botolph street, in the rear of the Massachusetts avenue estates. The series first above-mentioned number from 414 to 421 inclusive, and the public alleys between Commonwealth avenue and Newbury street number from 430 to 437 inclusive. Those from Irvington street to the rear of Massachusetts avenue are numbered from 401 to 404 inclusive, and the cross alley from Huntington avenue to St. Botolph street is No. 405.

In District No. 4 Public alley No. 301 has been laid out upon what was formerly River street place, from the end of River street to Pinckney street; in District No. 2 the passageway known as Chair alley has been laid out, from Cross street to Richmond street, as Public Alley No. 101; and in District No. 21, in East Boston, the passageway leading from Marginal street to Webster street, southeast of Cottage street, has been laid out as Public Alley No. 2001.

The construction ordered in the foregoing public alleys is chiefly asphalt in passageways where no attempt has been made at construction by the owners, and the repaving and regulation of the various forms of vitrified brick, flagging, stone and asphalt found in some of the passageways in the territory between Arlington street and Massachusetts avenue that had been placed there by the owners of abutting estates.

CHANGES IN STREET NAMES.

An order passed by the Board February 3, 1898, giving the name of Atlantic avenue to Cove street, which is a continuation of said avenue, from Summer street to Kneeland street, was confirmed by the Board of Aldermen, February

14, 1898, and took effect under the provisions of law governing the matter March 1, 1898.

An order passed by the Board February 5, 1898, giving the name of Waumbeck street to the public way known as Hamerton street, at Roxbury, leading, in continuation of said Waumbeck street, from Humboldt avenue to Crawford street, was confirmed by the Board of Aldermen February 14, 1898, and took effect under the provisions of law governing the matter March 1, 1898.

An order passed by the Board February 7, 1898, giving the name of Hemenway street to that part of Parker street between Boylston street and Huntington avenue, was confirmed by the Board of Aldermen February 14, 1898, and took effect under the provisions of law governing the matter March 1, 1898.

An order passed by the Board February 11, 1898, giving the name of Whittier street to the public way at Roxbury called Culvert street, was confirmed by the Board of Aldermen February 18, 1898, and took effect under the provisions of law governing the matter March 1, 1898.

An order passed by the Board February 11, 1898, giving the name of Hamilton street to the public way, at Dorchester, called Barrington street, was confirmed by the Board of Aldermen February 18, 1898, and took effect under the provisions of law governing the matter March 1, 1898.

An order passed by the Board February 11, 1898, changing the names of the streets at Dorchester known as Hudson street and Pontine street, forming a continuous thoroughfare from Dudley street to Norfolk avenue, to Burrell street, was confirmed by the Board of Aldermen February 18, 1898, and took effect under the provisions of law governing the matter March 1, 1898.

AUTHORITY GIVEN TO OPEN NEW STREETS.

Acting under the provisions of chapter 323 of the Acts of the Legislature of 1891, and acts in amendment thereof, the Board of Street Commissioners have, during the past year, given permission to land-owners to open the following private ways:

Roxbury.

West Walnut park, extension to Amory street.

Copley street, from West Walnut park to Columbus avenue.

Ernst street, from West Walnut park to Bragdon street.

Miles street, from West Walnut park to Bragdon street.

Darling street, from Hillside street to Calumet street.

Bray street, from Washington street to Columbus avenue.
Iroquois street, from Calumet street.
Colburn street, from Huntington avenue to Heath street.
Iroquois street, from Hillside street.

Dorchester.

Rosemont road, from Adams street to Dorchester avenue.
Dakota street, from Greenbrier street to Washington street.
Claybourne street, from Dakota street.
Wave avenue, from Savin Hill avenue.
Waldingfield street, from Pleasant street to the junction of
Sawyer avenue and Peverell street.
Raven street, from Crescent avenue.
Ballou avenue, an extension southwestwardly.
Mt. Ida road, from Bowdoin street.
Potosi street, from Mt. Ida road to Percival street.
Dunbar avenue, from Washington street.
Chipman street, from Dunbar avenue.
Laurel street, from Dunbar avenue.
Wentworth street, from Dunbar avenue.
Whitman street, from Dunbar avenue.
College street, from Whitman street to Wentworth street and
beyond.
Ashmont street, from Wentworth street.
Whitby street, from Pleasant street at junction with Stoughton
street.
Hobson street, from Bowdoin street to Coleman street.
Johnson terrace, from Lauriat avenue to the New England
Railroad.
Willowwood street.

West Roxbury.

Glenside avenue, from Glen road.
Glade avenue, from Glen road.
Gifford street, from Cornwall street.

Brighton.

Myles street, from Ashford street to Wadsworth street.
Oak Square avenue, from Washington street to Faneuil
street.

ASSESSMENTS FOR LAYING-OUT AND CONSTRUCTION OF
STREETS.

Assessments have been levied upon the estates abutting
upon the following streets, under the provisions of chapter

323 of the Acts of the Legislature of 1891, and acts in amendment or addition thereto:

STREET.	Date of Order.	Cost.	Amount Assessed.	Date of Assessment.
Andubon road.....	Nov. 7, 1895	\$40,126 16	\$20,378 65	Feb. 17, 1898
St. Alphonsus street,	Sept. 23, 1895	11,162 98	9,812 33	Mar. 3, 1898
Fullerton street.....	Oct. 12, 1896	7,618 48	7,618 48	Nov. 18, 1898
Wilder street.....	July 10, 1896	4,995 61	4,995 61	Nov. 18, 1898
Ellet street.....	Nov. 18, 1896	3,601 48	3,601 48	Nov. 18, 1898
Wolcott street.....	July 10, 1896	7,181 63	7,181 63	Nov. 18, 1898
Bloomfield street....	July 8, 1897	6,779 51	6,779 51	Nov. 18, 1898
		\$81,465 85	\$60,367 69	

BETTERMENTS.

The following betterments have been assessed during the year:

For the laying-out of the extension of Boylston street to Brookline avenue.	\$250,170 00
For the widening of Brighton avenue, from Commonwealth avenue to Union square	117,270 00
	<u>\$367,440 00</u>

Payments made for land damages and other claims, on account of laying out, widening, relocating and extending streets, including claims previous to January 31, 1898:

STREET LAYING-OUT DEPARTMENT APPROPRIATION.

Harold street, Roxbury	\$764 99
Folsom street, Dorchester	843 60
Tuttle avenue, Dorchester	790 00
Tremont street, Roxbury	5,000 00
	<u>\$7,398 59</u>

PAYMENTS MADE FROM OTHER APPROPRIATIONS.

Essex and Lincoln streets	\$5,668 00
Centre street, Dorchester	3,267 64
St. Martin street, Charlestown	650 00
Washington street, Brighton	1,000 00
Calumet street, Roxbury	51 00
<i>Carried forward</i>	<u>\$10,636 64</u>

<i>Brought forward</i>	.	.	.	.	\$10,636 64
Weld street, West Roxbury	.	.	.	.	257 99
Green street, Charlestown	.	.	.	.	2,079 00
Whitney street, Roxbury	.	.	.	.	3,044 81
Adams street, Dorchester	.	.	.	.	6,473 00
Brooks street, Brighton	.	.	.	.	3,000 00
Harvard street, Dorchester	.	.	.	.	200 00

Laying-Out and Construction of Highways:

Columbia road	.	.	.	\$381,146 38
Boylston street	.	.	.	166,344 11
Clinton street	.	.	.	116,983 98
Ipswich street	.	.	.	75,000 00
Spring street	.	.	.	5,620 97
Athelwold street	.	.	.	3,500 00
Peverell street	.	.	.	2,791 20
Batavia street	.	.	.	529 69
Belmore terrace	.	.	.	200 00
Alexander street	.	.	.	75 00
752,191 33				

Blue Hill and other avenues:

Columbus avenue	.	.	.	\$37,897 32
Blue Hill avenue	.	.	.	12,923 91
Huntington avenue	.	.	.	6,633 34
37,897 32				
\$815,780 09				

The following drafts have been drawn by the Board of Street Commissioners during the financial year in payment of land damages for takings for surface drainage and sewers, under the provisions of chapter 426 of the acts of the Legislature of 1897:

James Brennan, Tenean creek, between Elm and Park streets	.	.	.	.	\$5,000 00
John McMorro, Tenean creek, between Elm and Park streets	.	.	.	.	2,400 00
Ellen E. Willard, Tenean creek, between Elm and Park streets	.	.	.	.	2,231 00
Jennie L. Huebener, Tenean creek, between Elm and Park streets	.	.	.	.	1,567 00
Helen M. Nichols, Tenean creek, between Elm and Park streets	.	.	.	.	1,412 40

<i>Carried forward</i>	.	.	.	.	\$12,610 40
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<i>Brought forward</i>	\$12,610 40
Ambrose A. Ranney, sewer, Notre Dame street	1,200 00
Mary A. McMorro, Tenean creek, between Elm and Park streets	878 20
Mary Brophy, Tenean creek, between Templeton and Shelton streets	425 00
Joseph Amia, sewer, Oak terrace	150 00
R. C. Pepper, Oakland Garden fork of Canter- bury branch of Stony brook	75 00
	\$15,338 60

EXPENDITURES.

Salaries and other Expenses.

Salaries	\$17,444 68
Advertising	1,959 58
Printing	625 23
Stationery	242 79
Carriage-hire	269 00
Telephone and messenger service	124 37
Books and maps	76 50
Furniture, fittings, electrical work and material, and repairs, for offices	1,033 21
Incidentals	198 19
Estimates	175 00

Public Lands.

Care of Webb School building	\$25 00
Care of Thomas street School build- ing	25 00
Care of Thornton street School build- ing	10 00
Repairs and painting on Thomas street School building	143 70
Taxes, City of Everett, sewer assessment	\$57 50
City of Everett, tax	17 00
Town of Hull	46 44
	120 94
	324 64
	\$22,473 19

The yearly rentals of lands and buildings in charge of the Board of Street Commissioners amount to \$1,062.

The expenditures of the Surveying Division of the Street Laying-Out Department have been as follows:

Salaries	\$46,508 09
Instruments and repairs	879 75
Surveyors' supplies	2,719 57
Stationery and printing stock	278 62
Printing	606 90
Books and maps	216 90
Travelling expenses	131 50
Car tickets	736 67
Telephone	70 00
Furniture, fittings, electrical work and material, and repairs, for offices	2,075 75
Incidentals	91 45
Advertising	433 98
	\$54,830 18

PUBLIC LANDS.

The following is a list of the real estate belonging to the city in charge of the Board of Street Commissioners:

DESCRIPTION.	SQUARE FEET.
<i>City Proper.</i>	
Albany street, land opposite East Brookline street	1,074
Rented for \$100 a year.	
Harrison avenue, land between Brookline and Newton streets	4,740
<i>East Boston.</i>	
Paris street, Austin School estate	5,360
<i>Charlestown.</i>	
Rutherford avenue, land on northeast side	29,445
Small part of rented at \$12 a year.	
Remainder occupied by city departments.	
<i>Roxbury.</i>	
Swett street, land and buildings, old small-pox hospital	111,431
10,660 square feet leased for five years from November 1, 1894, for \$300 a year.	
Remainder occupied by city departments.	

DESCRIPTION.	SQUARE FEET.
Ritchie street, land opposite the Marcella street Home	22,716
Thornton street, Thornton street Primary School estate	6,644
<i>Dorchester.</i>	
Dorchester avenue and Gibson street.	208,750
42,000 square feet rented to Sewer Division of Street Department at \$150 a year.	
32,600 square feet rented to Boston Water Board at \$125 a year.	
52,200 square feet rented to Paving Division of Street Department at \$200 a year.	
Gibson street, land on southerly side, near Dorchester avenue	27,040
Gibson street, land on southerly side, near Adams street	27,890
Pasturage of grass land on east side of Dorchester avenue rented for \$75 a year.	
Blue Hill avenue, from Glenway street to McLellan street, adjoining Glenway street Primary School estate, part of Old Road, so called, discontinued	13,040
Baker's court, old lock-up estate	1,580
King's mill pond, so called, being that part of the bed of Tenean creek, or Smelt brook, between Mill, Exchange, Park and Adams streets and Neponset avenue, about	511,830
<i>West Roxbury.</i>	
Moreland street, land	30,421
Thomas street, Thomas street Primary School estate	10,954
<i>Brighton.</i>	
Western avenue, marsh, northeast of Western avenue and northwest of North Harvard street	10,890
Parkman street, land on southwest side of	5,000
<i>Islands, etc.</i>	
Great Brewster Island, Boston Harbor, about 16 acres. Rented for \$100 a year.	
Apple Island, Boston Harbor, about 9½ acres.	
Summer and Pleasant streets, in town of Everett, old gravel pits	20,700

Chapter 408 of the Acts of the Legislature of 1895 provided that the Board of Street Commissioners, at the request of the School Committee, shall take by purchase or otherwise, such lands for school purposes as the School Committee, with the approval of the Mayor, shall designate, etc., and that the damages sustained by any person under such taking shall be determined by agreement between said Board and person, etc. Under this act the Board have taken during the year the following lands:

LOCATION.	School.	From whom Taken or Purchased.	Date of Taking or Purchase.
Thomas park	South Boston High School....	City of Boston..	April 4, 1898
Munroe street.....	Munroe Street School.....	J. D. Williams and others, trustees.....	May 19, 1898
Monument square	Charlestown High School.....	Frederick D. Robbins.....	June 28, 1898
Quincy and Perth streets and Phipps avenue	Quincy and Perth streets Gram- mar School....	H. M. Cunning- ham.....	October 25, 1898
Pembroke street.....	Girls' High School.....	German Luther- an Society ...	November 16, 1898
Bailey street.....	Bailey Street School.....	Mary R Cleaves,	November 21, 1898

During the financial year the following payments have been made by the Board for lands taken for school purposes since the passage of the act of 1895:

East Boston High School:

Charles U. Cotting and others, trustees	\$33,392 60
James Woolley and Charles A. Tilden, trustees of the Cen- tral Associates	12,000 00
Henry Kenney	7,000 00
Edgar F. Power	3,500 00
B. H. Hatch	7,165 00
	\$63,057 60

South Boston High School:

City of Boston, Water Department	8,016 00
George Putnam School, Roxbury:	
Isador Marcus	9,584 50
<i>Carried forward</i>	\$80,658 10

<i>Brought forward</i>	\$80,658 10
Elm Street Primary School, Charlestown:	
Thomas F. McManus	10,291 40
Gibson School, School street, Dorchester:	
Andrew J. Vose	5,510 08
Longfellow School, West Roxbury (Roslin- dale):	
Bartlett P. Luce, jr., and Francis A. Wake- field	3,588 10
Grammar School, Quincy and Perth streets, Dorchester:	
H. M. Cunningham	16,841 76
William H. Kent School, Moulton and Vine streets, Charlestown:	
Benjamin F. Brown	\$858 49
Sarah W. D. Brown	1,165 86
	2,024 35
	<u>\$118,913 79</u>

SURVEYING DIVISION.

The number of men employed in the Surveying Division during the year has been about the same as during the previous year.

The three surveying parties detailed to make surveys in connection with sewerage works during a part of 1898 have continued that work during the whole of the past year for the City Engineer, and reference is made to the report of the Engineering Department for a detailed account of that work.

Thirty-six sectional plans have been filed during the year, which represent the completed work in new territory.

In addition to the surveys necessary for the filing of new plans, much work has been performed in connection with the refiling of plans in accordance with authority given the Board of Street Commissioners by the Legislature, Acts of 1898, chapter 210.

Considerable time has been spent in making laying-out plans of streets in conformity with lines plotted in previous years.

The new sections filed include portions of Dorchester, West Roxbury and Brighton, and are given in greater detail farther on in this report.

Much attention has been given to exact measuring, especially in connection with the triangulation.

For many years the city standard, as laid down on the

sidewalk in the rear of City Hall, has been used as the basis for all city work, and for all purposes of surveying within small areas, has shown no appreciable degree of inaccuracy, but when applied to the large area included in the survey of Boston, the multiplication of a very small error develops into a very substantial and conspicuous one.

It has been the purpose from the beginning of the survey to make it fit into the coast survey system. It has, therefore, been important that the measurements should conform to the national standard.

The Surveying Division is under great obligations to the Coast and Geodetic Survey; also to ex-Superintendent Mendenhall for facilities afforded in making the comparison between the city standard and the legal one; also for assistance in preparing a new accurate standard.

This new standard will be laid off on a single bar of steel, which has been placed on the west side of the Old Court House, in Court square.

The work of setting stone monuments has been carried on during the year. This work, however, is by no means up to date, and it is quite important that more than the ordinary amount of this work should be carried on during the coming year.

Triangulation Work.

Considerable time has been devoted to triangulation work during the year. The following table gives the number of times the several stations were visited, and the number of angles taken at each position:

NAME OF STATION.	No. of times visited between February 1, 1898, and Feb- ruary 1, 1899.	No. of angles taken between February 1, 1898, and Feb- ruary 1, 1899.
Savin Hill	16	1,231
Clarendon Hill.....	4	450
Blue Hill	8	789
Prospect Hill, Waltham.....	1	114
Mt. Auburn	6	489
Bussey	8	633
<i>Carried forward.....</i>	43	3,706

NAME OF STATION.	No. of times visited between February 1, 1898, and Feb- ruary 1, 1899.	No. of angles taken between February 1, 1898, and Feb- ruary 1, 1899.
<i>Brought forward</i>	43	3,706
Quincy	6	612
Nantasket	3	234
Parker Hill Reservoir.....	3	300
Pope's Hill.....	3	322
Waban Reservoir	4	254
Ames.....	2	42
Codman Hill.....	1	121
Central.....	3	252
Highland.....	2	138
Bellevue Bound.....	5	306
Walnut Hill.....	2	228
Bigelow Hill.....	5	348
Arnold-street Spike.....	1	30
Mt. Benedict.....	2	139
Old Colony Railroad Spike	1	96
Thomas Park.....	2	60
Nonantum Hill	3	396
Roxbury Stand-pipe	1	30
	92	7,614

PLAN 5.

During the past year the work was confined principally to the finishing in detail of the studies made during the previous year, no new system for development having been projected and no second hearing on the plan was given.

The sections representing the finished work and filed during the year show an adjustment of new streets introduced for development, with the old ones lying in the territory adjacent to the north side of Franklin field and which is traversed diagonally by Talbot avenue.

The prominent features of the system shown are the extension of Kingsdale street to Talbot avenue, with a 40-foot street leading from that avenue to Nightingale street, designed to be extended by future filing ultimately to Harvard street, opposite Wales street, making practically an extension of the latter to Talbot avenue. One of the plans filed (X 34) extending west of Blue Hill avenue represents the initial filing of a system for the development of the area bounded by Harvard street, Austin street, Canterbury street and Blue Hill avenue, the only feature of which being shown is a 60-foot street departing from the circle at the junction of Blue Hill avenue, Harvard street and Talbot avenue, and is intended in a measure to be an extension of the latter, which is prohibitory in a direct line to Franklin park without practically levelling the small hill which lies in line on the westerly side of Blue Hill avenue. This substitute street follows closely around the southerly foot of this hill at an easy grade of about 4 per cent. to Canterbury street, connecting with Franklin park. This street forms the base from which the supplementary streets depart.

Two hearings were given during the year under authority of the Acts of the Legislature, chapter 210 of 1898, on the following dates: May 13, 1898, and May 20, 1898.

The hearing of May 13, which was also the first hearing held under this law, was on section numbered X 17 and in relation to the extension of Harvard avenue to Washington street, and is also in relation to a change in the lines of Millet street.

The changes in relation to Harvard avenue were made in accordance with the petition, and filed October 19, 1898.

The hearing of May 20 was held on territory shown on sections numbered X 20, X 21, X 22 and X 24, and related to a relocation of the lines of School street at Athelwold street, and a reduction of the width of Waldeck street from 50 feet to 40 feet.

The changes were made on X 21 in relation to the reduction in the width of Waldeck street, and filed August 31, 1898.

The changes were made on X 24 in relation to the lines of School street and Athelwold street in accordance with the petition, and filed October 19, 1898.

The following is a statement of the work done during the year:

Plan from actual survey of three sections, X 34, X 35 and X 36; size, 13 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, X 45 and X 56 ; size, 9 feet by 5 feet ; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, X 66 and X 75 ; size, 9 feet by 5 feet ; scale, $\frac{1}{250}$. (In progress.)

Three sectional plans of sections, X 34, X 35 and X 36 ; size of each, 4 feet by 4 feet ; scale, $\frac{1}{250}$. (Complete with grades.)

These plans were approved by the Mayor and filed January 30, 1899, with the City Engineer.

In this territory of about 68.88 acres covered by the above plans there are comprised :

Public streets :

Number of streets	.	.	.	.	.	7
Length.	.	.	.	.	6,380 ft.	= 1.20 miles
Area	.	.	.	.	422,200 sq. ft.	= 9.70 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891 :

Number of streets	.	.	.	.	.	13
Length	.	.	.	.	5,615 ft.	= 1.06 miles
Area	.	.	.	.	215,000 sq. ft.	= 4.93 acres

Totals :

Number of streets	.	.	.	.	.	19
Length	.	.	.	.	11,365 ft.	= 2.15 miles
Area	.	.	.	.	637,200 sq. ft.	= 14.63 acres

Percentage of above area absorbed by all streets, old and new, 21.2 %.

Plans and profiles completed showing grades of :

Browning avenue, from Bernard street to Street No. 1646.

Kerwin street, from Bernard street to Talbot avenue.

Street No. 1073, from Kingsdale street to Talbot avenue.

Street No. 1601, from Bernard street to Talbot avenue.

Street No. 1646, from Nightingale street to Talbot avenue.

Street No. 1742, from Harvard street to Street No. 1743.

Street No. 1743, from street No. 1742 to Street No. 1769.

Street No. 1744, from Street No. 1743 to Street No. 1769.

Grade plan of sections X 34, X 35 and X 36 ; completed ; scale, $\frac{1}{1000}$.

In connection with the sectional and other plans enumerated above, the following work has been done :

Number of titles looked up	210
Number of conveyances copied	212
Number of plans copied from Suffolk and Norfolk Registries and elsewhere	31

PLAN 7.

One second hearing was given on this plan, on November 25, 1898, on territory bounded approximately by Dorchester and Vinton streets, the New York, New Haven & Hartford Railroad, Crescent and Dorchester avenues, Columbia road, Boston and Howell streets and Dorchester avenue.

This territory had been previously provided with systems of streets which were practically ample for any future development, and under them the locality had gradually been assuming a character conforming to the lines of the larger avenues and to the location of the Old Colony Railroad.

Under a decree of the Superior Court, abolishing the grade crossing of Dorchester avenue and the railroad of the Old Colony Railroad Company, leased to the New York, New Haven & Hartford Railroad Company, filed June 23, 1898, was introduced a disturbing element to the previous lines of development.

The territory made the subject of this hearing is crossed diagonally by this new location for the railroad, while the old location abandoned will be used as a thoroughfare, probably in connection with Columbia road.

On either side, 110 feet from and parallel with the new railroad location, have been placed new streets; the one lying upon the southerly side being made of a width of 50 feet, between Dorchester avenue and Crescent avenue, while the one upon the northerly side will be fixed at 80 feet, with a view of its utility as a thoroughfare, leaving Dorchester avenue at its junction with Kemp street and continuing parallel with the railroad to the old location of the railroad, merging into and passing over it under Columbia road to Mt. Vernon street and the Cow pasture.

On the south side of the railroad the 50-foot street located 100 feet from it will continue parallel with it from Dorchester avenue, crossing Columbia road at a sub-grade and continuing to Crescent avenue, affording the territory which lies south of Columbia road, and at a lower grade a more direct northerly outlet.

With the exception of the introduction of this 50-foot

street, the territory lying between the new railroad, Columbia road and Mt. Vernon street will be developed on the lines which have existed for many years.

One of the most notable features of the proposed development is a suggested widening of Preble street to 70 feet, making, with Swett street widened to that width, a continuous thoroughfare of uniform width from Columbia road to Massachusetts avenue, and thence directly across the city to Harvard bridge and to Cambridge.

Midway between Hyde street and Kemp street has been located a 40-foot street running from Dorchester avenue to Columbia road; the streets shown in the old arrangement of plotting which have been retained are Hyde street and Kemp street and Washington avenue. From Washington avenue and from the previously mentioned 80-foot street are located 40-foot streets at equal distances of 200 feet apart from Kemp street.

Buttonwood court will be widened on either side, making it 25 feet, and will be extended to Moseley avenue and connect with it at right angles.

No provision has been made for connecting Carson street with Columbia road, as the grade for such is quite impracticable, and it is the intention to keep it at a lower and more favorable grade and connect with the 50-foot street which will run parallel with the railroad's new location.

From the bend in Carson street a new 40-foot street has been located over an old sewer location, running thence to Moseley avenue.

Another 40-foot street, departing from Crescent avenue opposite Newport street, will continue nearly parallel with Carson street as far as the new street parallel with the railroad new location.

West of Dorchester avenue, and between it and Boston street, the old system will be continued.

One hearing was held under authority of chapter 210 of the Acts of the Legislature of 1898, on July 15, 1898, on territory shown on sections numbered M 81, M 82, L 90, L 91, M 98, M 99, M 100, T 1 and U 10, in relation principally to the lines of Swett street and its intersecting streets. The plan showing these changes as petitioned for have not as yet been filed.

The following is a statement of the work done during the year:

Plan from actual survey of two sections, U 28 and U 33; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Completed.)

Plan from actual survey of two sections, U 9 and U 13; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Two sectional plans of Sections U 28 and U 33; size of each, 4 feet by 4 feet; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 30, 1899, with the City Engineer.

In this territory of about 45.92 acres covered by the above plan there are comprised:

Public streets:

Number of streets	6
Length	4,000 ft. = 0.76 miles
Area	247,200 sq. ft. = 5.67 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets	11
Length	7,200 ft. = 1.36 miles
Area	313,900 sq. ft. = 7.21 acres

Totals:

Number of streets	17
Length	11,200 ft. = 2.12 miles
Area	561,100 sq. ft. = 12.88 acres

Percentage of area of above territory absorbed by all streets, old and new, 28%.

Plan of territory showing Sections U 13, U 28, U 33, part of U 48, and U 49; size, 16 feet by 5 feet, scale, $\frac{1}{1000}$. (In progress.)

Grade plan of Sections U 28 and U 33, completed; scale, $\frac{1}{1000}$.

In connection with the sectional and other plans enumerated above, the following work has been done:

Number of titles looked up	655
Number of conveyances copied	354
Number of plans copied from Suffolk and Norfolk Registries and elsewhere	53

PLAN 8.

A second hearing was held on this plan, on November 11, 1898, on territory bounded approximately by Brooks street, Fairbanks street, Washington street and Nonantum street,

the boundary line between the cities of Boston and Newton and the Charles river.

A large proportion of this territory consists of quite an elevation locally known as Bigelow Hill, accessible at the present time only by streets possessed of extremely heavy gradients.

In the study of this territory an effort has been made to modify in a measure these grades by the introduction of new streets providing easier access to the summit as well as offering development for the rear of the already excessively deep lots, and opening up the land on the westerly slope towards the Charles river reservation and to the Newton line.

Among the features displayed at this hearing is the location of a new thoroughfare 50 feet in width, to depart from Brooks street in the vicinity of Faneuil station, thence over Parkman street, widened to that width and by a new street in a curved line connecting with Newton street; thence over the latter, also widened to 50 feet, to the intersection of Charles-view street, from which point it is continued in a curved line along the rear of the deep lots fronting upon Bigelow street, enabling the owners to utilize them; thence on the lines of a proposed 50-foot street and continuing as far as Burton street, where it is proposed to terminate it. As the exigencies of the future may require it the street may be continued to Hunnewell avenue in the city of Newton.

The portion of Richards street running north and south has been extended in a parallel manner with the proposed Newton street extension until it reaches the northwesterly base of Bigelow Hill, which it rounds and continues alongside the location of the Boston and Albany Railroad, and parallel with the Newton-street extension, but at a grade some 30 feet below it and terminating at Faneuil Station on Brooks street. From this street depart two streets 40 feet wide, 100 feet from and parallel with the railroad and 200 feet apart.

Another thoroughfare is projected from Oak square over Champney street, which is widened to 60 feet as far as Shedd street, also widened to the same width and extended at quite an angle to the Newton boundary line with the intention of connecting with Hunnewell avenue, in the city of Newton, at Elmhurst street, forming with this avenue a fine connection with easy grade, between Oak square and Newton.

It is proposed to extend Stratton street, with a slight bend in same, in order that it may connect with Matchett street at right angles.

Webster street has been treated in a similar manner.

Between Webster street and Hardwick street there has been projected from the above-mentioned Newton street extension a 40-foot street, midway between Webster street and Hardwick street, to Dunboy street.

The block bounded by Webster street, Dunboy street, Faneuil street and Bigelow street has been provided with streets so projected as to properly meet the requirements of future growth.

From Hardwick street, about 200 feet from Bigelow street, a street for future development has been introduced, which continues at about that distance from and parallel with Bigelow street and Dunboy street, and connects again with Hardwick street at a point farther east.

Gerrish street, at present a mere passageway in the rear of the lots on Newton and Bigelow streets, it is proposed to widen to 40 feet, and utilize as a street, permitting frontages for the rear land which can be used for building purposes.

A short street parallel with Faneuil street, and about 200 feet from it, connects Brooks street and Dunboy street, and a street is located 200 feet west of Brackett street, connecting Washington street and Faneuil streets.

A street 40 feet wide has been located from Oak square to the Newton boundary line, midway between Washington street and Tremont street.

Sections O 31, O 32 and O 33 comprise a portion of the finished work of the year, and were among the plans filed.

They show the completion of the studies and the practical completion of the work in detail for Nonantum Hill and the entire territory lying south of Washington street, at Oak square, extending back to Kenrick street, and westerly from Lake street to the Newton boundary line.

The preliminary studies for this work were explained fully in a previous report, and the completed work shows but little change or modification.

A compromise study has been made to meet the objection of some of the owners, and as a result the elimination of Crescent avenue has been abandoned, and the plans as filed appear to meet the approval of all.

A height of the steepness of Nonantum Hill can be treated satisfactorily in but one way, and that is in following its contours, which has been done with 40-foot streets at equal distance of about 200 feet apart. The straight portion of Crescent avenue from the Newton boundary line is extended northeasterly in a curved line intersecting the

streets which follow the southerly slope of the hill, and connecting with the northerly street at the summit. The avenue for the entire length will be made 50 feet wide.

Three hearings were given during the year under authority of the Acts of the Legislature, chapter 210, of 1898, on the following dates: June 10, 1898; July 8, 1898; January 27, 1899.

The hearing of June 10, 1898, was held on territory shown on sections numbered O 77 and O 78, in relation to the line and the extension of Ayr road, and in the introduction of Orkney road. The changes were made in accordance with the petition, and were filed August 31, 1898.

The hearing of July 8, 1898, was held on territory shown on sections numbered O 84, O 85, O 87, O 88, O 89, O 92, O 93, O 94, O 95 and O 96, and was in relation to the lines of Beacon street, within the grounds of Chestnut Hill Reservoir. The plan showing changes has not as yet been filed.

The hearing of January 27, 1899, was held on territory shown on sections numbered N 27 and N 28, and was in relation to the relocation of streets east of the extension of Chester street. The time limit not having expired these changes are still unfiled.

The following is a statement of the work done during the year:

Plan from actual survey of two sections, O 31 and O 32; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, O 23 and O 24; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, O 27 and O 28; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, O 29 and O 30; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, O 33 and O 34; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of three sections, O 8, O 9 and O 10; size, 13 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, O 11 and O 12; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Nine sectional plans of Sections F 92, F 93, O 9, O 10, O 11, O 31, O 32, O 33 and P 21; size of each, 4 feet by 4 feet; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 30, 1899, with the City Engineer.

In this territory of about 111.46 acres covered by the above plans there are comprised:

Public streets:

Number of streets	2
Length	1,830 ft. = 0.35 miles
Area	92,100 sq. ft. = 2.12 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets	19
Length	18,560 ft. = 3.51 miles
Area	724,500 sq. ft. = 16.63 acres

Totals:

Number of streets	20
Length	19,300 ft. = 3.66 miles
Area	816,600 sq. ft. = 18.75 acres

Percentage of above area absorbed by all streets, old and new, 20%.

Plans and profiles completed, showing grades of:

Burton street, from Washington street to Street No. 1713.

Crescent avenue, from Washington street to Newton line.

Matchett street, from Washington street to Street No. 1714.

Richards street, from Washington street to Street No. 1713.

Street No. 1137, from Street No. 1433 to Street No. 1458.

Street No. 1454, from Lake street to Street No. 1137.

Street No. 1454, from Street No. 1433 to Street No. 1460.

Street No. 1458, from Kenrick street to Nonantum street.

Street No. 1456, from Street No. 1137 to Street No. 1137.

Street No. 1460, from Lake street to Crescent avenue.

Street No. 1461, from Street No. 1458 to Newton line.

Street No. 1531, from Street No. 1458 to Newton line.

Street No. 1673, from Street No. 1458 to Newton line.

Street No. 1711, from Street No. 1717 to Newton line.

Street No. 1712, from Street No. 1717 to Newton line.

Street No. 1713, from Street No. 1714 to Newton line.
 Street No. 1714, from Burton street to Charlesview street.

Street No. 1717, from Street No. 1713 to Boston and Albany Railroad.

Street No. 1720, from Matchett street to Newton line.

Grade plan of Sections O 9, O 10, O 11, O 31, O 32, O 33, P 21, completed; scale, $\frac{1}{1000}$.

Contour plans showing contours at every 5 feet of Sections O 9, O 10, O 11 and O 12, showing territory bounded by Boston and Albany Railroad, Newton street, Charlesview street, Bigelow street, Webster street, Street No. 1714 and the Newton boundary line; size, 5 feet by 6 feet; scale, 40 feet to an inch. (Complete.)

In connection with the sectional and other plans enumerated above, the following work has been done:

Number of titles looked up	295
Number of conveyances copied	165
Number of plans copied from Suffolk and Norfolk Registries and elsewhere	16

PLAN 11.

A second hearing was held on October 21, 1898, on territory bounded approximately by the West Roxbury Parkway, West Roxbury Branch of the Old Colony Division of the New York, New Haven and Hartford Railroad, Centre street, Corey street, Garden street, Maple street, Weld street, Arthur street, Dunbar street and the Brookline boundary line.

Another second hearing was held on November 4, 1898, on territory bounded approximately by Baker street, the boundary line between the cities of Boston and Newton, and Arnold, Gould, Dunbar, Walker, Weld, Maple, Garden, Corey, Vermont, La Grange, Glenham and Perham streets.

These hearings exhibited the extension and amplification of the systems shown at previous hearings.

An exception can be noted of the large tract of land located between the West Roxbury parkway, Centre street, Willow street and Weld street.

These thoroughfares enclose quite an elevated tract of land, a remnant of the old Weld estate, and owing to the steepness of several points, presents quite a little difficulty in treatment. The obstacles have in a measure been overcome and a system devised which it is to be hoped will give satisfaction. A 40-foot street has been located from Weld street to Centre

street, parallel with the West Roxbury parkway. Church street will be widened to 60 feet from Centre street to the Brookline boundary line. From Weld street on the south of the parkway, a street is located parallel with the parkway, which will be 40 feet as far as Church street, from which point it will be made 60 feet to Centre street. From this street and from Centre street, depart at regular intervals of 200 feet, streets 40 feet in width, extending to Weld street, while these streets will be intersected at right angles and at proper distances apart (600 feet) by two 40-foot streets.

Midway from Willow street and Maple street, in the rear of the deep lots fronting on those streets, has been introduced a 40-foot street, extending from Centre street to Weld street.

Most of the territory shown at these hearings had been privately planned many years ago, and much of it is built upon. Effort has been made to preserve as far as possible these old plottings. Scarcely if any new features in the way of thoroughfares have been introduced, other than previously mentioned, a simple filling-in or a sub-dividing of the larger tracts being ample for the ordinary purposes.

The prominent thoroughfares subjected to treatment on the plans filed are Centre street, with a proposed widening to 80 feet; La Grange street, with a proposed widening to 80 feet; Baker street, to be widened to 80 feet; Weld street, to 60 feet, and Corey street, to 50 feet; also minor widenings and straightenings on various other streets.

The following is a statement of the work done during the year:

Plan from actual survey of two sections, Z 24 and Z 37; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, Z 25 and Z 36; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, Z 29 and Z 32; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, Z 30 and Z 31; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of one section, Z 35; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, Z 47 and Z 54; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, Z 44 and Z 57; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of one section, Z 45; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, Z 48 and Z 53; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of two sections, Z 49 and Z 52; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of one section, Z 68; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of one section, Z 69; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of one section, Z 46; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of one section, Z 56; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of two sections, Z 67 and Z 74; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Plan from actual survey of one section; Z 71; size 5 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Twenty sectional plans of Sections Z 24, Z 25, Z 29, Z 30, Z 31, Z 32, Z 35, Z 36, Z 37, Z 44, Z 45, Z 47, Z 48, Z 49, Z 52, Z 53, Z 54, Z 57, Z 68 and Z 69; size of each, 4 feet by 4 feet; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 30, 1899, with the City Engineer.

In this territory of about 425.86 acres covered by the above sectional plans there are comprised:

Public streets:

Number of streets	.	.	.	.	.	14
Length	.	.	.	.	20,730 ft.	= 3.93 miles
Area	.	.	.	.	916,540 sq. ft.	= 21.04 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets	.	.	.	.	.	65
Length	.	.	.	.	71,760 ft.	= 13.60 miles
Area	.	.	.	.	2,693,465 sq. ft.	= 61.83 acres

Totals:

Number of streets	.	.	.	.	.	72
Length	.	.	.	.	81,655 ft.	= 15.47 miles
Area	.	.	.	.	3,610,000 sq. ft.	= 82.87 acres

Percentage of area of above territory absorbed by all streets, old and new, 23.6%.

Plans and profiles completed showing grades of:

La Grange street, from Mt. Vernon street to Arnold street.

Centre street, from Church street to Corey street.

- Willow street, from Weld street to Dunbar street.
Newfield street, from La Grange street to Street No. 1554.
Caspar street, from Street No. 1554 to Street No. 1707.
Lasell street, from Baker street to Street No. 1705.
Perham street, from Baker street to Mt. Vernon street.
Bent street, from Weld street to Lasell street.
Atlantis street, from Weld street to Lasell street.
Harwood street, from Weld street to Lasell street.
Glenham street, from La Grange street to Baker street.
Temple terrace, from Baker street to Perham street.
Farragut street, from Baker street to Ellswood street.
Ellswood street, from Baker street to Farragut street.
Street No. 1553, from Weld street to Street No. 1554.
Street No. 1554, from La Grange street to Westover street.
Weld street, from Baker street to Arnold street.
Keith street, from Baker street to La Grange street.
Libby street, from Mt. Vernon street to Keith street.
Alder street, from Mt. Vernon street to Keith street.
Carroll street, from Mt. Vernon street to Lasell street.
Francis street, from Mt. Vernon street to Keith street.
Street No. 1573, from Mt. Vernon street to Street No. 1575.
Street No. 1574, from La Grange street to Dent street.
Potomac street, from Mt. Vernon street to Yorktown street.
Street No. 1580, from Weld street to Street No. 1554.
Crest street, from Mt. Vernon street to Kirk street.
Street No. 1586, from Montview street to Street No. 1585.
Houston street, from Montview street to Weld street.
Garden street, from Corey street to Willow street.
Street No. 1597, from Church street to Street No. 1678.
Maple street, from Weld street to Centre street.
Street No. 1676, from Weld street to Centre street.
Arthur street, from Dunbar street to Street No. 1688.
Walker street, from Dunbar street to Centre street.
Bruce street, from Dunbar street to Street No. 1677.
Raymond street, from Dunbar street to Street No. 1688.
Street No. 1681, from Weld street to Street No. 1688.
Street No. 1682, from Street No. 1680 to Street No. 1685.
Street No. 1683, from Dunbar street to Street No. 1685.
Street No. 1684, from Ricker street to Street No. 1689.
Street No. 1685, from Weld street to Street No. 1684.

Church street, from Street No. 1688 to Brookline line.
 Street No. 1687, from Weld street to Street No. 1689.
 Street No. 1688, from Centre street to Church street.
 Street No. 1689, from Street No. 1687 to 23,000 feet
 west of State House.

Dunbar street, from Westover street to Street No. 1683.

Ricker street, from Walker street to Brookline line.

Abbott street, from Willow street to Street No. 1678.

Westover street, from Dunbar street to Weld street.

Maple avenue, from Addington road to Weld street.

Avelon road, from Addington road to Weld street.

Chilton road, from Addington road to Weld street.

Worley street, from Weld street to Dwinnell street.

Street No. 1705, from Street No. 1580 to Street No.
 1706.

Street No. 1706, from Newfield street to Street No.
 1705.

Street No. 1707, from La Grange street to Street No.
 1553.

Street No. 1708, from La Grange street to Weld street.

Whittemore street, from Montview street to Crest street.

Dwinnell street, from Weld street to Street No. 1580.

Grade plan of Sections Z 24, Z 25, Z 29, Z 30, Z 31,
 Z 32, Z 35, Z 36, Z 37, Z 44, Z 45, Z 47, Z 48, Z 49, Z 52,
 Z 53, Z 54, Z 57, Z 68 and Z 69, completed; scale, $\frac{1}{1000}$.

Contour plans showing contours at every foot of Sections
 Z 36, Z 37, Z 43, Z 44, Z 45, Z 56, Z 57 and Z 58, showing
 territory bounded by Weld street, Church street, Centre
 street and Willow street; size, 5 feet by 8 feet; scale, 40 feet
 to an inch.

Contour plans showing contours at every foot of Sections
 Y 30, Y 31, Z 21, Z 22, Z 38, Z 39 and Z 40, showing
 territory bounded by Weld street, Centre street and West
 Roxbury Parkway; scale, 40 feet to an inch. (In progress.)

Contour plans showing contours at every foot of Sections
 Z 37, Z 38, Z 39, Z 40, Z 41, Z 42, Z 43, Z 44, Z 58 and
 Z 59, showing territory bounded by Weld street, Church
 street, Centre street and Montclair street; scale, 40 feet to
 an inch. (In progress.)

In connection with the sectional and other plans enumer-
 ated above the following work has been done:

Number of titles looked up	722
Number of conveyances copied	694
Number of plans copied from Suffolk and Norfolk Registries and elsewhere	31

PLAN 13.

The work done during the year on this plan was confined principally to the working out in detail of the system which had been presented at hearings and which has been previously described. The sections filed show a widening of Perkins street to a width of 40 feet, mainly upon the southerly side, and an extension of Catalpa street (South Huntington avenue), entering Centre street nearly at right angles, opposite Boylston terrace. An extension of Boylston street, at a width of 50 feet, to Jamaica way is a feature of the plan for development.

These streets, with the proper intersecting streets, form a system which is satisfactory to owners and to the city.

Two hearings were held, under authority of the Acts of the Legislature, chapter 210, of 1898, on the following dates: June 7, 1898, and August 19, 1898.

The hearing of June 7 was held on territory shown on sections numbered S 23 and S 24, and was in relation to the extension of Evergreen street to South Huntington avenue. The plans showing changes have not as yet been filed.

The hearing of August 19 was held on territory shown on sections numbered S 24 and S 37, and was in relation to the introduction of new streets from Perkins street on the Burt estate in substitution of streets numbered 1346 and 1347. The plans showing the changes (S 24) have not as yet been filed, but the changes petitioned for were, so far as shown on section numbered S 37, embodied in the plan when filed, January 30, 1899.

The following is a statement of the work done during the year:

Plan from actual survey of two sections, S 36 and S 37; size, 9 feet by 5 feet; scale, $\frac{1}{250}$. (Complete.)

Plan from actual survey of one section, S 45; size, 5 feet by 5 feet; scale, $\frac{1}{250}$. (In progress.)

Two sectional plans of Sections S 36 and S 37; size of each, 4 feet by 4 feet; scale, $\frac{1}{250}$. (Complete with grades.) These plans were approved by the Mayor, and filed January 30, 1899, with the City Engineer.

In this territory of about 45.92 acres covered by the above plans there are comprised:

Public streets:

Number of streets	1
Length	2,010 ft. = 0.38 miles
Area	66,330 sq. ft. = 1.52 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets	.	.	.	.	.	10
Length	.	.	.	6,410 ft.	=	1.21 miles
Area	.	.	.	233,010 sq. ft.	=	5.35 acres

Totals:

Number of streets	.	.	.	.	.	10
Length	.	.	.	7,190 ft.	=	1.36 miles
Area	.	.	.	299,340 sq. ft.	=	6.87 acres

Percentage of area of above territory, exclusive of parks, etc., absorbed by all streets, old and new, 21%.

Plans and profiles, completed, showing grades of:

Barbara street, from Centre street to Street No. 902.

Street No. 902, from Perkins street to Centre street.

Street No. 1346, from Perkins street to Street No. 1504.

Street No. 1502, from Street No. 902 to Street No. 1503.

Street No. 1503, from Perkins street to Lochstead avenue.

Street No. 1504, from Centre street to Jamaicaway.

Street No. 1759, from Zamora street to Street No. 1765.

Street No. 1765, from Perkins street to Castleton street.

Street No. 1766, from Street No. 1765 to Street No. 1765.

Grade plans of Sections S 36 and S 37, completed; scale, $\frac{1}{1000}$.

ADDITIONAL HEARINGS.

The following is a list of additional hearings on changes to be made on filed plans, under authority of chapter 210 of the Acts of the Legislature of 1898:

PLAN 2.

A hearing was held on May 3, 1898, on sections numbered 21 and 22, and related to an extension of Cummington street to Blandford street and a reduction in the width of the latter from 60 feet to 50 feet. The changes were made in accordance with the petition, and the plans were filed August 31, 1898.

A hearing was held on July 29, 1898, on sections numbered 22 and 25, and related to the reduction in the width of Miner street from 50 feet to 40 feet. The changes were made in accordance with the petition, and the plans were filed December 5, 1898.

PLAN 3.

A hearing was held on January 27, 1899, on sections numbered X 20 and X 21, Ff 11 and Ff 30, and related to a reduction of the proposed width of Medway street to 50 feet. The plans showing these changes have not as yet been filed.

PLANS 3 AND 5.

A hearing was held on May 6, 1898, on sections numbered X 48, X 49 and X 50, and related principally to streets connecting with Templeton street and Shawmut park. These changes were made in accordance with the petition, with additional changes, and the plans were filed October 19, 1898.

PLAN 6.

A hearing was held on May 13, 1898, on sections numbered X 99 and X 100, and related to a reduction in the width of street numbered 554, from Dorchester avenue to Adams street, from 60 feet to 40 feet, and the substitution of a new street leading from Ruggles place to street numbered 554, and the extension of Ruggles place to the latter. The plans showing these changes have not as yet been filed.

PLAN 5.

Under chapter 149 of the Acts of the Legislature of 1897, authority was given to extend Dakota street upon sections numbered X 18 and X 23 to Washington street. These changes have not as yet been made.

Under chapter 457 of the Acts of the Legislature of 1897 authority was given the Street Commissioners to make any changes that they might deem necessary upon section numbered X 18. No changes under authority of the act have yet been filed upon this plan.

In connection with the sectional and other plans enumerated above, the following work has been done:

Number of titles looked up 17

SUMMARY OF WORK DURING THE YEAR.

Sectional plans completed, approved and filed during the year: — 36 sections, F 92, F 93, O 9, O 10, O 11, O 31, O 32, O 33, P 21, S 36, S 37, U 28, U 33, X 34, X 35, X 36,

Z 24, Z 25, Z 29, Z 30, Z 31, Z 32, Z 35, Z 36, Z 37, Z 44,
Z 45, Z 47, Z 48, Z 49, Z 52, Z 53, Z 54, Z 57, Z 68, Z 69.

Territory covered by above plans . . . 698.04 acres
Public streets:

Number of streets	30
Length	34,950 ft. = 6.62 miles
Area	1,744,370 sq. ft. = 40.05 acres

New streets established, private streets adopted and public
streets proposed to be widened under chapter 323 of
the Acts of 1891:

Number of streets	119
Length	109,545 ft. = 20.74 miles
Area	4,179,875 sq. ft. = 95.95 acres

Totals:

Number of streets	138
Length	130,710 ft. = 24.78 miles
Area	5,924,245 sq. ft. = 136.00 acres

Percentage of area of above territory absorbed by all streets,
old and new, 22.75%.

Plans from actual survey completed:

Number	16
Number of sections comprised	29
Area of sections comprised	625.07 acres
Scale	$\frac{1}{250}$

Plans from actual survey in progress:

Number	14
Number of sections comprised	25
Area of sections comprised	540.28
Scale	$\frac{1}{250}$

Plans from actual survey in progress of territory:

Number	6
Number of sections comprised	56
Area of sections comprised	1,158.36 acres
Scale	$\frac{1}{1000}$

Plans and profiles showing grades completed:

Number of streets	96
Scale	$\frac{1}{250}$ and $\frac{1}{50}$

Plans showing contours at every one foot completed:

Number of plans	7
Number of sections comprised	38
Area of section comprised	802.58 acres
Scale	.40 feet to an inch

Plans showing contours at every one foot in progress:

Number of plans	2
Number of sections comprised	17
Area of section comprised	387.52 acres
Scale	.40 feet to an inch

Plans showing contours at every five feet completed:

Number of plans	1
Number of sections comprised	4
Area of sections comprised	35.94 acres
Scale	.40 feet to an inch

In connection with the sectional and other plans enumerated above, completed and in progress, the following work has been done:

Number of titles looked up	1,899
Number of conveyances copied	1,425
Number of plans copied from Suffolk Registry and elsewhere	131

Summary of all surveying work done under chapter 323 of the Acts of 1891, and amendments thereto, to February 1, 1898:

Preliminary plans completed:

Number	14
Numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14	
Area	20,621 acres
Sizes, 11 ft. 6 in. by 8 ft. 9 in.; 12 ft. 3 in. by 5 ft.; 14 ft. by 10 ft.; 16 ft. 6 in. by 10 ft.; 10 ft. by 8 ft.; 9 ft. by 5 ft.; 11 ft. by 10 ft.; 20 ft. by 10 ft.; 8 ft. 6 in. by 7 ft.; 17 ft. by 10 ft.; 20 ft. by 10 ft.; 18 ft. by 10 ft.; 15 ft. 6 in. by 10 ft.; and 16 ft. 6 in. by 10 ft.; scale, 50 ft. to an inch, and $\frac{1}{1000}$.	

Public streets:

Number of streets	811
Length	1,167,631 ft. = 221.14 miles

Private streets:

Number of streets	1,012
Length	501,401 ft. = 94.96 miles

Estates:

Number of estates	22,094
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Working plans completed:

Number	1
Size	16 ft. by 7 ft.
Scale	50 ft. to an inch

Plans from actual survey completed :

Number	185
Number of sections	392
Area of sections comprised	7,619.80 acres
Scale	$\frac{1}{250}$

Plans from actual survey completed of territory :

Number	4
Number of sections comprised	57
Area of sections comprised	1,047.25 acres
Scale	$\frac{1}{1000}$

Plans from actual survey in progress :

Number	14
Number of sections comprised	25
Area of sections comprised	540.28 acres
Scale	$\frac{1}{250}$

Plans from actual survey in progress, of territory :

Number	6
Number of sections comprised	56
Area of sections comprised	1,158.36 acres
Scale	$\frac{1}{1000}$

Sectional plans completed, approved and filed :

Number of plans	381
Size of each	4 ft. by 4 ft.
Scale	$\frac{1}{250}$

Territory covered by plans :

Area	7,463.91 acres
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Public streets :

Number of streets	270
Length	427,135 ft. = 80.89 miles
Area	23,591,772 sq. ft. = 541.59 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891 :

Number of streets	1,187
Length	1,115,024 ft. = 211.17 miles
Area	46,561,198 sq. ft. = 1,068.89 acres

Totals :

Number of streets	1,313
Length	1,388,152 ft. = 262.93 miles
Area	70,152,970 sq. ft. = 1,610.48 acres

Percentage of area of above territory absorbed by all streets, old and new, 22.38%.

Sectional plans completed, ready to file:

Number of plans	1
Size	4 ft. by 4 ft.
Scale	$\frac{1}{250}$

Territory covered by plan:

Area	5.24 acres
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Public streets:

Number of streets	1
Length	246 ft. = 0.04 mile
Area	39,360 sq. ft. = 0.90 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets	3
Length	932 ft. = 0.18 mile
Area	37,008 sq. ft. = 0.85 acre

Totals of sectional plans filed and ready to file:

Number of plans	382
Size of each	4 ft. by 4 ft.
Scale	$\frac{1}{250}$

Territory covered by plans:

Area	7,469.15 acres
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Public streets:

Number of streets	271
Length	427,381 ft. = 80.93 miles
Area	23,631,132 sq. ft. = 542.49 acres

New streets established, private streets adopted and public streets proposed to be widened under chapter 323 of the Acts of 1891:

Number of streets	1,190
Length	1,115,956 ft. = 211.15 miles
Area	46,598,206 sq. ft. = 1,069.74 acres

Totals:

Number of streets	1,316
Length	1,389,330 ft. = 263.15 miles
Area	70,229,338 sq. ft. = 1,612.24 acres

Percentage of area of above territory, exclusive of parks, rivers, etc., absorbed by all streets, old and new, 22.38%.

Streets located and relocated on sectional plans completed, approved and filed:

Length	1,388,152 ft. = 262.93 miles
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Streets located and relocated on sectional plans completed,
ready to file:

Length 1,178 ft. = 0.22 mile

Index plans completed:

Number of plans 2

Size 4 ft. by 4 ft.

Scale $\frac{1}{1000}$ and $\frac{1}{1500}$

Grade plans of whole territories completed:

Number of plans 2

Number of sections comprised 25

Area of sections comprised 237.75 acres

Scale $\frac{1}{1000}$

Grade plans showing sections:

Number of plans 17

Number of sections completed 380

Area of sections completed 7,408.03 acres

Scale $\frac{1}{1000}$

Plans showing contours at every 5 feet, completed:

Number of plans 5

Number of sections comprised 53

Area of sections comprised 1,083.27 acres

Scales 40 ft. to an inch and $\frac{1}{1000}$

Tracings showing contours at every 5 feet, completed:

Number of tracings 2

Number of sections comprised 19

Area of sections comprised 385.33 acres

Scale $\frac{1}{1000}$

Plans showing contours at every foot, completed:

Number of plans 8

Number of sections comprised 38

Area of sections comprised 769.21 acres

Scale $\frac{1}{250}$

Plans showing contours at every foot, completed:

Number of plans 1

Number of sections comprised 1

Area of sections comprised 22.96 acres

Scale 20 ft. to an inch

Plans showing contours at every foot, completed:

Number of plans 31

Number of sections comprised 175

Area of sections comprised 3,404.16 acres

Scale 40 ft. to an inch

Plans showing contours at every foot, in progress :

Number of plans	7
Number of sections comprised	17
Area of sections comprised	387.52 acres
Scale	40 ft. to an inch

Plans showing contours at every 2 feet, completed :

Number of plans	1
Number of sections comprised	3
Area of sections comprised	68.87 acres
Scale	40 ft. to an inch

Conveyances copied and titles looked up :

Number	18,699
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Plans copied from Suffolk and Norfolk Registries :

Number	3,210
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Stone monuments set in districts covered by Plans 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13, for use in determination of position and location of street lines :

Number of monuments	262
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Miscellaneous work includes tracings, estimates of areas by calculations, planimeter, etc., sketches and studies of different plats, copies of city's notes for use in the field, etc.

LIST OF PLANS.

SURVEYING DIVISION, IN STREET LAYING-OUT DEPARTMENT, JANUARY 31, 1899.

ROOMS 23 TO 27 INCLUSIVE, OLD COURT-HOUSE.

Indexed.	Classification.	Number of Plans.
On Wall, Room 27.....	Preliminary Plan 1 Back Bay Fens.....	1
“ “ “ 24.....	“ “ 2 Back Bay.....	1
“ “ “ 26.....	“ “ 3 Neponset.....	1
“ Frame “ 27.....	“ “ 4 Back Bay.....	1
“ Wall “ 27.....	“ “ 5 Central Dorchester.....	1
“ “ “ 23.....	“ “ 6 Lower Mills and Mattapan...	1
“ “ “ 27.....	“ “ 7 South Bay	1
“ Frame “ 25	“ “ 8 Brighton	1
“ Wall “ 27.....	“ “ 9 Part of Roxbury	1
“ Frame “ 27.....	“ “ 10 Part of West Roxbury	1
“ “ “ 25.....	“ “ 11 “ “ “ “	1
“ “ “ 27.....	“ “ 12 “ “ “ “	1
“ “ “ 27.....	“ “ 13 “ “ Roxbury and West Roxbury.....	1
“ Wall “ 25.....	“ “ 14 Grove Hall and Meeting House Hill.....	1
Vol. A.....	Miscellaneous plans of estates. Plans 1 and 2....	179
Vol. B.....	“ “ “ “ “ 3 “ 5....	310
Vol. C.....	“ “ “ “ “ 4, 9 and 8..	585
Vol. D.....	“ “ “ “ “ 10	178
Vol. E.....	“ “ “ “ “ 12, 13 and 14,	570
Vol. F.....	“ “ “ “ “ 12, 13 and 14,	115
Vol. G.....	“ “ “ “ “ 5, 6 and 12,	331
Vol. H.....	“ “ “ “ “ 8	174
Vol. I.....	“ “ “ “ “ 13	137
Vol. J.....	“ “ “ “ “ 6 and 12...	42
Vol. I	Deed Tracings.....	40
Vol. II	“ “	208
Vol. III	“ “	44
Vol. IV.....	“ “	48
Vol. V.....	“ “	10
Vol. VI.....	“ “	23
Case A	Miscellaneous plans, studies, etc.....	50
Carried forward .....	.....	3,058

LIST OF PLANS.—*Continued.*

Indexed.	Classification.	Number of Plans.
<i>Brought forward</i>		3,058
Case E	Plans of streets approved by Street Commissioners in Roxbury.....	52
“ “	Plans of streets approved by Street Commissioners in Dorchester.....	125
“ “	Plans of streets approved by Street Commissioners in West Roxbury	63
“ “	Plans of streets approved by Street Commissioners in Brighton.....	36
“ “	Plans of streets approved by Street Commissioners in Charlestown	1
“ “	Plans of streets approved by Street Commissioners in City Proper	2
“ “	Plans of streets approved by Street Commissioners in South Boston.....	2
“ “	Plans of streets approved by Street Commissioners in East Boston.....	10
Case DD	Miscellaneous plans, estates, etc.	52
Case EE	Miscellaneous deed plans, South Bay.....	47
	<i>Plans from Actual Survey.</i>	
	Sections. Sections. Sections.	
	T 19, 20 — U 11, 12 U 9, 10 — T 1, 2	2
	L 89, 90 — M 81, 82, 83 L 91, 92 — M 98, 99, 100	2
	S 4, 17 S 16, 25 S 24, 37	3
	S 18, 23 S 19 S 36, 45	3
Case GG.....	U 28, 33 U 13, 19	2
	Plats of Plan 7, scale, $\frac{1}{1000}$	3
	Index to “ “ “ “	1
	Plat of Plan 13, scale, $\frac{1}{1000}$	1
	<i>Plans from Actual Survey.</i>	
	Sections. Sections. Sections.	
	Ee 1, Ff 10 Ee 20, Ff 11 Ee 21, Ff 30	3
	Ff 8, 13 Ff 9, 12, 29 Cc 1, Dd 10	3
	W 65, 76, 85 W 72, 89, 92 W 73, 74, 75	3
	W 86, 87, 88 W 90, 91 W 93, 94, 95, 96	3
	M 46, 47, 48 M 53, 54, 55 Z 61, 80	3
Case HH.....	Z 62, 63 Z 64, 77 Z 76, 85	3
	Z 78, 79 Z 81, 100 Z 82, 99	3
	Z 83, 98 Z 84, 97 Ee 20, Ff 11	3
	Y 90, 91 Cc 1, Dd 10 Cc 2, 3	3
	Plat of Plan 10, scale, $\frac{1}{1000}$	1
<i>Carried forward</i>		3,493

LIST OF PLANS.—*Continued.*

Indexed.	Classification.	Number of Plans.
<i>Brought forward</i>.....	.....	3,493
Case HH.....	Plat of Plans 13 and 14 ¹⁰⁰⁰	1
	“ “ Parkway taking Plan 10.....	1
	<i>Plans from Actual Survey.</i>	
	Sections. Sections. Sections.	
	T 31, 50, 51 T 47, 48 T 63, 64	3
	T 53, 54 T 55, 66 T 77, 78	3
	T 32, 49 T 52, 69 T 65, 76	3
	T 95, 96 T 84, 85 T 74, 78, 88	3
	T 67, 68 T 72, 73 T 75, 86	3
	Miscellaneous plans, estates and deeds.....	92
Case JJ.....	<i>Plans from Actual Survey.</i>	
	Sections. Sections. Sections.	
	O 94, 95, 96, 97, R 6 X — 17	2
	W 55, 66 X 19, 20	2
	X 21, 22 X 18, 23, 38	2
	Miscellaneous plans, estates, etc.	10
	Plats of Plan 8, scale, ¹⁰⁰⁰	3
	M 31 (part), 32 (part), 33 (part), 41 (part), 48, 49, 50, 51 (part), 60 (part)	1
	M 52, 53, 70, 51 (part), 60 (part).....	1
	M 28, 29, 30, 31 (part), 32 (part), 33 (part)..... } N 21, 22, 23, 39, 40, 41 (part), 42..... }	1
Case KK.....	M 66, 75, 86 M 67, 74, 87	2
	Plan 4, scale, ¹⁰⁰⁰ Y 98, 99, 100	2
	Dd 18, 19, 20 Dd 21, 22, Ee 30	2
	Ee 9, 10 Ee 11, 12	2
	Plans 6—12, two parts.....	2
	X 91, 92 Y 81, 82, X 90	2
	Dd 1, 2, 3 Dd 40, Ee 31, 32	2
	Back Bay Park and vicinity.....	1
	M 67 M 68, 69 M 70, N 61, 62, 63	3
	M 71, 72, 73 M 89, 90 N 5, 6	3
Case LL.....	N 11, 12 N 13, 14 N 15, 16, 17	3
	N 23, 24 N 25, 26 N 27, 28, 29	3
	O 40, N 31, 32, 33 N 59, 60 N 78, 79, 80	3
	N 81, 82, 83 O 1, N 10 O 17, 18	3
	O 19, 20 O 23, 24 N 30, O 21, 22	3
	O 27, 28 O 29, 30 O 31, 32	3
<i>Carried forward</i>.....	.....	3,663

LIST OF PLANS.—*Continued.*

Indexed.	Classification.	Number of Plans.
<i>Brought forward</i>		3,663
	<i>Plans from Actual Survey.</i>	
	Sections. Sections. Sections.	
Case LL.....	O 33, 34 O 35, 36 O 37, 38	3
	O 39, 40 N 50, O 41 O 42, 43	3
	O 44, 45 O 46, 47 O 48, 49, 50	3
	O 52 O 53, 54 O 55, 56	3
	O 57, 58 N 51, O 59, 60 O 61, 62, 63	3
	O 64, 65 O 66, 67 O 68, 69	3
	O 73, 74 O 75, 76 O 77, 78	3
	O 83, 84, 85 O 87, 88 O 92, 93, 72, 89	3
	O 8, 9, 10 O 11, 12	2
	X 73, 68 Ee 3, 18, 23, X 83, 98	2
Case MM.....	X 84, 97, Ee 4, 17 X 86, 95, Ee 6, 15, 26	2
	X 69, 72—X 67, 74 X 87, 94, Ee 7, 14, 27	3
	X 32, 49, 52 X 85, 96, Ee 5, 16, 25	2
	Ee 2, 19, X 82, 99 X 30, 81—X 48, 53	3
	X 44, 54 X 50, 51 X 46, 55,	3
	X 66, 75 X 65, 76 X 45, 56	3
	X 88, 89 X 70, 71 X 81, 100	3
	Y 21, 40 Y 41, 60 Y 61, 80	3
	X 34, 35, 36	
	Index Plans,—Plan 6, scale, $\frac{1}{1000}$	1
	Contour plan of Wellington Hill.....	1
	Miscellaneous rolled plans of estates.....	12
	“ deed tracings.....	6
	<i>Plans from Actual Survey.</i>	
	Sections. Sections. Sections.	
Case NN.....	W 33, 48 W 34, 47 W 49, 50	3
	Cc 3, 18 Cc 4, 17 Cc 5, 16	3
	Cc 14, 27, 34 Cc 19 Cc 24, 37	3
	Cc 25, 36 Cc 26, 35 Cc 45	3
	Cc 46, 55 Cc 6, 15 Cc 23	3
	Z 85, 96 Z 86, 95 Z 94, Cc 7	3
	Z 71, 90 Z 72, 89 Z 68, 73	3
	Z 88, 93 Cc 47, 54 Cc 67, 74	3
	Cc 66, 75 Cc 8, 13 Cc 28, 33	3
	Cc 48, 53, 68	1
<i>Carried forward</i>		3,761

LIST OF PLANS. — *Concluded.*

Indexed.	Classification.	Number of Plans.
<i>Brought forward...</i>		3,761
	<i>Plans from Actual Survey.</i>	
	Sections. Sections. Sections.	
Case NN.....	Z 24, 37 Z 48, 53 Z 25, 36	3
	Z 49, 52 Z 29, 32 Z 30, 31	3
	Z 44, 57 Z 35, 46 Z 47, 54	3
	Z 67, 74 Z 45, 56 Z 69	3
	Miscellaneous tracings and blue prints.....	10
	Plans and Profiles showing grades.....	119
Case OO.....	Miscellaneous tracings and blue prints.....	182
“ PP.....	Plans and Profiles showing grades.....	232
“ QQ.....	“ “ “ “ “	222
“ RR.....	“ “ “ “ “	190
“ SS.....	“ “ “ “ “	156
“ TT.....	“ “ “ “ “	135
“ VV.....	“ “ “ “ “	85
“ “.....	Miscellaneous rolled plans.....	29
“ WW.....	Grade plans.....	33
	Contour plans.....	37
Drawer A-M.....	Miscellaneous plans in B of S, Sections A to M....	25
“ N.....	“ “ “ “ Section N	28
“ O-V.....	“ “ “ “ Section O to V....	3
“ W.....	“ “ “ “ Section W.....	20
“ X-Z.....	“ “ “ “ Sections X to Z....	10
“ Miscel.....	“ “ “ “ “	7
Total.....		5,296

Not included in the foregoing list there are the following lithographed plans:		
Lithographed plans of City of Boston, scale, $\frac{1}{25000}$.	Report, 1893.....	21
“ “ “ “ “ “ “ “ “ “	“ 1894.....	2
“ “ “ “ “ “ “ “ “ “	“ 1895.....	53
“ “ “ “ Bowdoin street, Hawkins street “	“ 1894.....	16
“ “ “ “ Boston Common and vicinity “	“	83
“ “ “ “ Section T 2.....	“	190
“ “ “ “ “ N 24.....	“	196
“ “ “ “ “ N 25.....	“	196
“ “ “ “ “ O 74.....	“	196
“ “ “ “ “ O 75.....	“	196
“ “ “ “ “ O 77.....	“	196

Respectfully submitted,

JOHN P. DORE,
JOHN H. DUANE,
SALEM D. CHARLES,
Street Commissioners.



ANNUAL REPORT
OF THE
TREASURY DEPARTMENT
FOR THE FINANCIAL YEAR 1898-99.

CITY OF BOSTON, TREASURY DEPARTMENT,
CITY HALL, February 23, 1899.

HON. JOSIAH QUINCY,

Mayor of the City of Boston :

SIR, — I herewith transmit the annual report of the transactions of the Treasury Department, which includes the receipts and payments of the City of Boston and County of Suffolk for the financial year of 1898-99, beginning February 1, 1898, and terminating January 31, 1899, with a statement of the debt of the City and the Sinking Funds for the redemption of the same, an exhibit of the yearly receipts and payments of the City of Boston and County of Suffolk, the aggregate of the receipts and payments of the Sinking Funds, for the period of seventeen years six and a half months, the length of time of the occupation of the office of City Treasurer of Boston by the undersigned ; also an Appendix showing the Trust Funds in the custody of the undersigned.

Respectfully submitted,

ALFRED T. TURNER,
City Treasurer.

**ANNUAL REPORT OF THE CITY TREASURER FOR THE
FINANCIAL YEAR 1898-99, WHICH ENDED JANUARY 31,
1899.**

Balance of Cash on hand February 1, 1898, brought from the financial year 1897-98			\$4,094,352 66
RECEIPTS.			
Received during the year 1898-99 on account of the City of Boston from:			
City Collector		\$26,606,035 93	
City Loans:			
Sewerage Works, 3½ %	\$1,500,000 00		
Laying Out and Construction of Highways, 3½ %	811,650 00		
Blue Hill and other avenues, 3½ %	750,000 00		
School-houses, 3½ %	650,000 00		
Market or other public purposes, 3½ %	616,000 00		
Public Parks, 3½ %	500,000 00		
Various municipal purposes, Feb. 21, 1898, 3½ %	224,000 00		
Various Municipal Purposes, Sept. 30, 1898, 3½ %	201,500 00		
Extension of Mains, 3½ %	200,000 00		
Rapid Transit, 3½ %	200,000 00		
Street Improvements, June 30, 1898, 3½ %	181,480 00		
Library Building, Copley square, 3½ %	100,000 00		
South Union Station, 3½ %	100,000 00		
Faneuil Hall Building Reconstruction, 3½ %	80,000 00		
Various Municipal Purposes, Nov. 21, 1898, 3½ %	62,500 00		
New Buildings, City Hospital, 3½ %	61,500 00		
Cambridge Bridge, 3½ %	50,000 00		
Wire Department, 3½ %	50,000 00		
New Ferry Landing, 3½ %	26,000 00		
Back Bay Fens Sewage, 3½ %	25,000 00		
Chapel, Mt. Hope Cemetery, 3½ %	25,000 00		
Street Improvements, General, 3½ %	22,000 00		
Bridge, Lauriat avenue, 3½ %	21,000 00		
Washington street, between Grove Hall and Columbia road, 3½ %	4,500 00		
Buildings, etc., Long Island, 3½ %	2,500 00		
Bath-house, Neponset River, 3½ %	2,500 00		
Bathing Establishment, Ward 15, 3½ %	2,500 00		
Bathing Pool, Cabot street, 3½ %	2,500 00		
Swimming Pool, Orchard park, 3½ %	2,500 00		
Bathing Establishment, Charles River, 3½ %	1,500 00		
Evergreen Cemetery Wall, 3½ %	1,500 00		
Temporary Loan, anticipation of Taxes:		6,477,630 00	
2½ %	\$3,000,000 00		
2½ %	500,000 00		
Board of Commissioners of Sinking-Funds:		3,500,000 00	
For redemption of Debt	\$3,392,570 04		
For cost of redemption of Debt	1,040 71		
Interest on Bank Deposits:		3,393,610 75	
General Account	\$80,053 97		
Franklin Trades School Fund	7,165 26		
Ann White Vose Building	1,547 86		
Wyman Building Fund	181 77		
John Foster Trust Fund	128 34		
Water Works Income, Interest on \$5,000,000 received from Commonwealth of Massa- chusetts		89,077 20	
Wyman Building Fund, bequest of Thomas T. Wyman		72,962 16	
		65,000 00	
Carried forward		\$40,204,316 04	\$4,094,352 66

<i>Brought forward</i>		\$40,204,316 04	\$4,094,352 66
John Foster Trust Fund, Channing Monumental Statue		30,000 00	
Pay-roll Tailings, Settlements with Cashier, parties unpaid		11,323 00	
Premium on Loans Negotiated:			
City Loans		6,940 00	
Tax Titles, etc.		3,317 41	
Public Library Trust Funds, Codman Memorial Fund		2,852 41	
Sidewalk Assessments Tailing, account		14 54	40,258,763 40
On account of the County of Suffolk:			
City Collector	\$263,642 12		
Board of Commissioners of Sinking Funds for Redemption of Debt	64,000 00		
Pay-roll Tailings	679 72		328,321 84
			<u>\$44,681,437 90</u>

PAYMENTS

MADE ON ACCOUNT OF THE CITY OF BOSTON DURING THE FINANCIAL YEAR 1898-99.

On Mayor's drafts charged to the following appropriations:			
Assessing Department.....			\$152,692 37
Auditing Department.....			39,498 10
Baths Department:			
Baths Department.....	\$61,674 63		
Bath-house, Neponset River.....	2,500 00		
Bath-house, etc., opposite Charlestown Heights Park.....	4,060 38		
Bathing Establishment, Charles River.....	1,500 00		
Bathing Establishment, Ward 15.....	3,163 51		
Bathing-pool, etc., Cabot street.....	2,324 16		
Commonwealth Park, Gymnasium.....	13,259 99		
Blue Hill and other avenues.....			88,482 67
Board of Aldermen.....			293,434 61
Building Department:			34,142 00
Department Expenses.....	\$91,946 64		
Board of Appeal.....	1,725 45		
Cemetery Department:			93,672 09
Cemetery Department.....	\$47,610 00		
Chapel, Mt. Hope Cemetery.....	1,947 79		
Copp's Hill Burying Ground, reconstruction of wall.....	1,000 00		
Mt. Hope Cemetery.....	2,005 00		
City Clerk Department.....			52,562 79
City Council:			51,616 65
Incidental Expenses.....	\$16,804 42		
City Council Proceedings.....	18,935 87		
City Debt Requirements:			35,740 29
City Debt.....	\$1,844,230 00		
Interest.....	2,130,677 54		
City Loans, Redemption of:			3,974,907 54
Redemption of City Debt Proper.....	\$2,101,720 04		
Redemption of Coghuitate Water Debt....	990,000 00		
Cost of Redemption of Matured Bonds....	1,040 71		
City Messenger Department.....			3,092,760 75
Clerk of Committees Department:			28,999 83
Department Expenses.....	\$13,211 73		
Reference Library.....	113 75		
Collecting Department.....			13,325 48
Common Council.....			105,000 00
Damages by Dogs, etc.....			29,404 13
Election Department:			2,145 70
Election Department.....	\$133,146 21		
Portable Booths and Furnishing.....	29,595 73		
Engineering Department:			162,741 94
Engineering Department.....	\$79,840 85		
Faneuil Hall Building, reconstruction ...	6,392 36		
Fire Department:			86,233 21
Fire Department.....	\$1,170,966 94		
Engine-house and site, North End.....	1,121 93		
Engine-house, Ward 23.....	10,205 76		
Fire-boat.....	3,631 25		
Ladder truck, house, and chemical engine, Grove Hall.....	17,864 23		
Salt-Water Fire service.....	7,500 00		
Veterinary Hospital.....	11,286 54		
			1,222,576 65
Carried forward.....			\$9,559,936 80

TREASURY DEPARTMENT.

5

<i>Brought forward</i>			\$9,559,986 80
Franklin Trades School Fund.....			572 78
Health Department:			
Health Department.....	\$149,890 45		
Bath-house, South Bay, Roxbury side.....	2,777 79		
Steamer "Vigilant," new boiler.....	5,000 00		
			157,668 24
Hospital Department:			
Hospital Department.....	\$385,763 48		
Ann White Vose building.....	64,215 41		
Coal Pockets.....	10,814 36		
Electric Light Plant.....	4,844 99		
Furnishing Surgical Ward.....	1,467 84		
New Buildings, City Hospital.....	87,619 82		
Nurses' Home Site, furnishing, etc.....	57,488 75		
			612,214 65
Institutions Department:			
Children's Institutions Department.....	\$169,070 37		
House of Reformation, Rainsford Island improvements.....	6,500 00		
Parental School, new buildings and furnishing.....	2,040 56		
Insane Hospital Department.....	289,485 04		
Improvement of Water Service.....	2,048 78		
Pauper Institutions Department.....	112,917 29		
Buildings, etc., Long Island.....	1,006 53		
Salt-Water Fire System, Long Island.....	857 21		
Institutions Registration Department.....	16,287 57		
Steamer "J. Putnam Bradlee".....	17,553 60		
Steamer "John Howard".....	4,246 15		
			622,013 10
Lamp Department.....			651,273 41
Law Department.....			41,392 07
Laying-Out and Construction of Highways:			
Laying-Out and Construction of Highways.....	\$1,253,625 77		
Interest on debt.....	163,453 50		
Charlestown street.....	266 50		
			1,417,345 77
Library Department:			
Library Department.....	\$246,855 87		
Branch Library, Broadway Extension, improvements.....	532 68		
Library Building, Dartmouth street.....	66,314 62		
Library Building, Dartmouth street, furnishing.....	2,393 80		
Library Department, Trust Funds, Income.....	8,271 41		
			324,868 98
Market Department.....			8,613 14
Mayor:			
Mayor.....	\$40,448 16		
Public Celebrations.....	32,228 12		
Athletic Sports, Boston Common, July 4.....	400 00		
Fireworks, North End, July 4.....	200 00		
			73,276 28
Municipal Statistics Department:			
Municipal Statistics Department.....	\$8,999 63		
"City Record".....	7,952 40		
			16,952 03
Music Department.....			9,546 37
Overseeing of the Poor Department.....			132,042 28
Park Department:			
Park Department.....	\$140,000 00		
Public Parks.....	400,631 71		
Billings Field, construction.....	1,935 41		
Playground, Billings Field, West Roxbury.....	225 00		
Playstead, Neponset.....	9,005 02		
Playstead, Neponset, construction.....	3,536 68		
Playstead, North Brighton.....	407 59		
Playground, North End.....	31,269 21		
Strandway, from Marine Park, west.....	86,634 31		
			673,644 93
Phillips Street Fund Income.....			2,000 00
Police Department:			
Police Department.....	\$1,680,539 35		
Police Charitable Fund, Income.....	8,907 00		
			1,689,446 36
Printing Department.....			129,700 89
Public Buildings Department:			
Public Buildings Department.....	\$309,328 33		
Public Bath-house.....	39,366 64		
			348,694 97
<i>Carried forward</i>			\$16,470,701 90

<i>Brought forward</i>			\$16,470,701 90
Public Grounds Department:			
Public Grounds Department.....	\$93,883 17		
Highland Park.....	4,635 13		
Square, Bunker Hill, Vine and Moulton streets, improvement of.....	1,092 22		
Swimming-pool, etc., Orchard Park.....	2,383 75		
			101,994 27
Randidge Trust Fund, Income.....			2,598 48
Rapid Transit:			
Rapid Transit.....	\$477,886 01		
Interest on Debt.....	163,954 22		
Charlestown Bridge.....	359,663 80		
Rapid Transit Alterations.....	77,906 29		
			1,079,410 32
Registry Department.....			29,850 69
Reserved Fund.....			68,287 61
School Committee:			
School Committee.....	\$2,422,946 73		
Public Buildings, School Expenses.....	249,973 69		
Bowdoin Dorchester School Fund, Income,.....	1,009 17		
Gibson School Fund, Income.....	1,961 52		
Horace Mann School Fund, Income.....	80 00		
School Buildings, improvements in.....	42,063 80		
School-houses.....	564,657 26		
Bailey-street School, additional land.....	9,250 00		
Primary School, Aberdeen District, Building.....	10,544 87		
			3,302,487 04
Sidewalk Assessments, Repayment of.....			3,329 52
Sinking-Funds Department.....			2,466 16
South Union Station.....			220,879 87
Soldiers' Relief Department.....			223,374 03
Street Department:			
Central Office.....		\$19,186 24	
Bridge Division:			
Bridge Division.....	\$129,253 03		
Cambridge Bridges Division.....	13,569 89		
Abolishment of Grade Crossings.....	280,857 40		
Cambridge Bridge.....	7,336 37		
Gold-street Bridge.....	9,328 02		
Harvard-street Bridge, reconstruction.....	335 91		
Reconstruction of Bridges.....	10,670 13		
Talbot-avenue Bridge.....	25,000 00		
		476,410 75	
Ferry Division:			
Ferry Division.....	\$213,055 79		
New Ferry Landing.....	79,135 68		
Electric Lights for Ferry-boats.....	2,137 12		
New Ferry-boats.....	50,463 60		
		344,792 19	
Paving Division:			
Paving Division.....	\$726,255 20		
Albany street, in front of Massachusetts Homoeopathic Hospital, asphaltting.....	1,222 00		
Brighton avenue, Ward 25, reconstruction.....	1,072 91		
Brooks street, Ward 25, construction.....	3,000 00		
Cabot street, Linden Park to Vernon, asphaltting.....	207 52		
Carleton street, Ward 10, construction.....	208 09		
Centre street, Ward 20, construction.....	1,250 00		
Dudley street, Brook avenue to Upham's Corner, paving.....	1,139 00		
Freeport street, Ward 24, Retaining Wall, North Margin street, between Thacher street and Endicott street, asphaltting.....	6,372 98		
Rand street, Roxbury, reconstruction.....	152 89		
Hull street, Salem street to Snowhill street, paving.....	1,604 55		
	6,851 63		
Street improvements:			
General.....	78,225 93		
Ward 1.....	6,000 00		
Ward 2.....	6,000 00		
Ward 3.....	26,493 91		
Ward 4.....	14,488 78		
Ward 5.....	6,165 17		
Ward 6.....	22,705 96		
Ward 7.....	20,194 53		
Ward 8.....	19,874 66		
Ward 9.....	17,965 16		
<i>Carried forward</i>	\$967,440 87	\$840,389 18	\$21,505,879 89

<i>Brought forward</i>	\$967,440 87	\$840,389 18	\$21,505,879 89
Ward 10.....	12,922 87		
Ward 11.....	6,000 00		
Ward 12.....	13,481 83		
Ward 13.....	8,304 65		
Ward 14.....	11,087 59		
Ward 15.....	16,091 85		
Ward 16.....	13,771 74		
Ward 17.....	10,976 23		
Ward 18.....	20,077 14		
Ward 19.....	12,547 34		
Ward 20.....	13,960 00		
Ward 21.....	6,000 00		
Ward 22.....	13,086 29		
Ward 23.....	13,301 91		
Ward 24.....	13,960 00		
Ward 25.....	4,186 90		
Washington street, between Grove Hall and Columbia road.....	107 30		
Sanitary Division.....		1,157,304 51	
Sewer Division:		508,132 88	
Sewer Division.....	\$378,470 77		
Sewerage Works.....	1,490,304 50		
Interest on Sewerage Works Debt.....	26,250 00		
Back Bay Fens, sewage.....	25,000 00		
Stony Brook Damages.....	672 71		
Stony Brook Improvement.....	94,434 76		
Street-Cleaning Division.....		2,015,132 74	
Watering Division.....		316,052 73	
		138,728 57	
Street Laying-Out Department:			4,975,760 61
Street Laying-Out Department.....	\$22,473 19		
Widening and extending.....	7,398 59		
Adams street, Park to Parkman, widen- ing.....	6,473 00		
Alford street, widening and construc- tion.....	10,000 00		
Atlantic street, Ward 15, widening and construction.....	6,441 71		
Beacham-street extension, laying out and construction.....	3,878 39		
Calumet street, Ward 22, widening and construction.....	51 00		
Centre street, Ward 24.....	3,267 64		
Essex and Lincoln streets.....	5,668 00		
Green street, Main to High, widening... Harvard street.....	2,079 00		
Quincy street, Ward 4, laying out and construction.....	200 00		
Washington street, Ward 25.....	927 71		
Weld street, Ward 23, widening and con- struction.....	1,000 00		
Whitney-street extension.....	257 99		
	3,044 81		
Treasury Department.....			73,161 03
Temporary Loan, 1898-99.....			43,860 81
Water Department:			3,500,000 00
Cochituate Division.....	\$817,670 66		
Interest on Debt.....	841,792 52		
Sinking-Fund. Requirements for Debt...	193,395 00		
Additional Supply of Water.....	2,992 11		
Extension of Mains, etc.....	152,601 63		
Weights and Measures Department.....			2,008,451 92
Wire department.....			24,633 35
			58,422 85
Total payments on Mayor's Drafts.....			\$32,190,170 54
Amounts paid, but not drawn for by Mayor through the Auditor's office, charged to the following accounts:			
Water Works Fund. Investment in City of Boston Bonds.....		\$4,699,000 00	
Commonwealth of Massachusetts:			
National Bank Taxes.....	\$557,136 74		
State Tax.....	536,670 00		
Liquor License Revenue.....	361,366 50		
Metropolitan Water Tax, Sinking Fund Requirement, Interest on Loan, and Cost of Maintenance.....	285,600 54		
<i>Carried forward</i>	\$1,740,773 78	\$4,699,000 00	\$32,190,170 54

<i>Brought forward</i>	\$1,740,773 78	\$4,699,000 00	\$32,190,170 54
Corporation Tax.....	10,417 09		
Abolition of Grade Crossings account.....	37,648 26		
Abolition of Grade Crossings, Interest on Loan.....	19,206 05		
Armory Loan, Sinking Fund Requirement.....	12,623 15		
Armory Loan, Interest on.....	21,600 00		
Metropolitan Sewer, Sinking Fund Requirement.....	8,572 09		
Metropolitan Sewer, Interest on Loan.....	35,386 14		
Metropolitan Sewer, Cost of Maintenance.....	21,868 95		
Metropolitan High Level Sewer.....	4,090 50		
Metropolitan Sewer, Neponset Valley, Sinking Fund Requirement.....	1,066 58		
Metropolitan Sewer, Neponset Valley, Interest on Loan.....	4,155 48		
Metropolitan Sewer, Neponset Valley, Cost of Maintenance.....	281 40		
		1,917,689 47	
Board of Commissioners of Sinking Funds:			
Revenue Collected.....	\$97,931 38		
Premium on Loans negotiated.....	6,940 00		
		104,871 38	
Pay-roll Tailings, payments by Cashier to parties not paid by Paymasters.....		9,126 12	
Liquor License Revenue Refunded.....		6,919 78	
Residue Tax Sales, etc.....		6,392 42	
Mt. Hope Cemetery Trust Fund.....		5,000 00	
Cochituate Water Rates refunded.....		4,204 93	
Tax Titles, etc.....		3,212 24	
Sewer Maintenance Assessments refunded:			
Sewer Maintenance.....	\$1,069 47		
Sewer Maintenance protested.....	1,220 86		
		2,290 33	
Taxes refunded:			
Taxes.....	\$1,604 25		
Protested Taxes.....	8 16		
		1,612 41	
Old Claims, City Account.....		1,483 23	
Public Library Trust Fund, Bradlee Bequest.....		1,000 00	
Street Watering Assessments refunded:			
Street Watering.....	\$139 98		
Street Watering Protested.....	306 92		
		446 90	
Sidewalk Assessment Tailings.....		110 46	
Duplicate and Overpayments to City Collector.....		76 67	
Tuition of Non-Residents refunded.....		25 62	
Mystic Water Rates refunded.....		5 00	
		6,764,466 96	
Total payments on City account			\$38,954,637 50
<i>County of Suffolk.</i>			
Paid during the financial year 1898-99, as allowed and certified by the Auditor of the City of Boston acting as Auditor of the County of Suffolk, under authority of Sect. 24, Chap. 23, Public Statutes:			
County Buildings.....			\$32,752 06
Court House.....			32,333 62
Jail.....			41,383 20
Supreme Judicial Court.....			25,463 69
Superior Court, Civil Sessions.....			188,945 30
Superior Court, Criminal Session.....			80,328 55
Probate Court and office.....			22,115 65
Municipal Court, Civil Session.....			20,997 27
Municipal Court, Criminal Session.....			80,350 62
Municipal Court, Charlestown.....			9,105 17
East Boston District Court.....			7,453 92
Municipal Court, South Boston.....			10,291 87
Municipal Court, Dorchester District.....			5,574 17
Municipal Court, Roxbury District.....			11,960 76
Municipal Court, West Roxbury District.....			5,350 62
Municipal Court, Brighton District.....			5,281 25
Police Court, Chelsea.....			6,237 45
Registry of Deeds.....			54,246 46
Insanity Cases.....			20,147 46
<i>Carried forward</i>			\$660,319 18

<i>Brought forward</i>			\$660,319 18
Medical Examinations			12,985 03
Miscellaneous Expenses			19,171 85
House of Correction, South Boston			81,942 33
House of Correction, Deer Island.....			147,663 46
House of Correction, South Boston, Machinery, Materials, etc.....			12,405 48
House of Correction, Deer Island, Machinery, Materials, etc.....			43,559 11
Court of Registration.....			1,209 07
Penal Institutions:			
Office Expenses			21,383 87
Deer Island Hospital, Ward A.....			2,749 85
County Loans, Redemption of			40,000 00
County Debt Sinking-Fund Requirements ..			49,287 00
Total payments allowed by Auditor			\$1,092,675 73
Amounts drawn for by Auditor and approved by the Mayor:			
Interest on County Debt	\$130,180 00		
County Buildings.....	1,135 46		
House of Correction, Deer Island.....	3,919 10		
House of Correction, Deer Island, Machinery, Materials, etc.....	15,620 42		
County of Suffolk.....	1,718 40		
			152,573 38
Other payments as County Treasurer:			
Bail Refunded.....	\$2,348 39		
County fines to Complainant.....	840 10		
Pay-roll Tailings	410 24		
Bounty for Destruction of Seals.....	87 00		
County fines awarded to wife.....	60 00		
Attorneys' Admission Fees, Refunded.....	39 00		
Old Claims.....	7 00		
			3,791 73
Total payments on Account of the County of Suffolk.....			\$1,249,040 84
RECAPITULATION.			
Cash Balance, February 1, 1898.....			\$4,094,352 66
Receipts from February 1, 1898, to January 31, 1899, both inclusive:			
Account of City of Boston:			
City Collector.....	\$26,606,035 93		
Temporary Loans	3,500,000 00		
City Loans.....	6,477,630 00		
Other Sources.....	3,675,097 47		
		\$40,258,763 40	
Account of County of Suffolk:			
City Collector.....	\$263,642 12		
Other Sources.....	64,679 72		
		328,321 84	
			40,587,085 24
			\$44,681,437 90
Payments from February 1, 1898, to January 31, 1899, both inclusive:			
Account of City of Boston:			
General Drafts	\$12,606,384 70		
Pay-roll Drafts.....	10,822,922 89		
Special Drafts	8,760,862 95		
Amounts not drawn for by Mayor through Auditor's office.....	6,764,466 96		
		\$38,954,637 50	
Account of County of Suffolk:			
General Payments.....	\$1,092,675 73		
Special Drafts.....	152,573 38		
Other Amounts.....	3,791 73		
		1,249,040 84	
			40,203,678 34
Cash Balance, January 31, 1899, carried forward to Financial Year 1899-1900.....			\$4,477,759 56

Bay State Gas Co. Guarantee Fund, ...	1,328 00	Washington National Bank.....	87,576 28
Randulge Trust Fund.....	1,005 06	Columbia Trust Company.....	14,406 66
Protested Betterments, Parkway, Old Harbor.....	984 82		\$3,409,403 31
Tax Titles, etc.....	857 48	Colonial National Bank, Special Account..	36,872 43
Naturalization Fees, Payable to the Social Law Library.....	737 50	Colonial National Bank, Special Account..	65,181 77
Old Claims, County Account.....	441 12	Mechanics National Bank, Special Ac- count.....	30,128 34
Evergreen Cemetery Trust Fund....	384 00	Second National Bank, Special Account..	361,597 16
Daniel Preston Lot.....	381 15		\$3,903,183 01
Dorchester North Burial Ground Trust Fund.....	318 00	Cash and cash vouchers in office, including advances made on Mayor's Drafts and County of Suffolk Requisitions of 1899- 1900, duly certified by the City Auditor, and approved by the Mayor and County Auditor, chargeable to the appropriations for the financial year 1899-1900.....	574,576 55
Franklin Park Betterments, Repay- ment of.....	238 22		
Mt. Hope Cemetery Trust Fund....	110 82		
Samuel E. Sawyer Bequest.....	109 93		
Gibson School Fund.....	79		
	1,284,122 40		
	\$4,477,759 56		
	\$4,477,759 56		

DEBT MATURED AND PAID DURING FINANCIAL YEAR 1898-99.

Date of Order.	Rate per cent.	Object of Loan.	Date Due.	Amount Due.	Amount Paid.	Totals.
April 21, 1868.....	6	Chestnut-Hill Reservoir.....	June 16, 1898.	\$250,000 00		
April 21, 1868.....	6	Water Works, Wards 13, 14, 15, Roxbury.....	June 16, 1898.	200,000 00	\$450,000 00	\$450,000 00
Aug. 9, 1877.....	4	Improved Sewerage.....	Oct. 1, 1898.	\$100,000 00	\$100,000 00	100,000 00
Sept. 16, 1885.....	3	Suffolk County Court House	Oct. 1, 1898.	\$17,000 00	\$17,000 00	17,000 00
June 29, 1868	6	Chestnut-Hill Reservoir.....	Oct. 3, 1898.	\$540,000 00	\$540,000 00	540,000 00
Aug. 9, 1877.....	4	Improved Sewerage	Jan. 1, 1899.	\$1,000,000 00	\$856,150 00	
Jan. 3, 1889.....	4	Miscellaneous Purposes.....	Jan. 1, 1899.	769,000 00	641,000 00	
Feb. 16, 1889.....	4	"	Jan. 1, 1899.	416,000 00	387,000 00	
Feb. 16, 1889.....	4	County of Suffolk: Miscellaneous.....	Jan. 1, 1899.		\$14,000 00	1,884,150 00
		House of Correction.....	Jan. 1, 1899.	9,000 00	9,000 00	
Oct. 15, 1869.....	5	Consolidated Street Improvement, Sterling Loan.....	Jan. 1, 1899.	\$117,570 04		23,000 00
		Cost of Redemption, Sterling Loan.....	.....	1,040 71		
		Total Debt Matured.....	.....	\$3,473,570 04	\$118,610 75	118,610 75
		Total Debt Paid			\$3,131,720 04	\$3,132,760 75
		Cost of Redemption			1,040 71	
					\$3,132,760 75	

TREASURY DEPARTMENT.

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NEW DEBT ISSUED DURING FINANCIAL YEAR 1898-99.

Date of Order.	Rate per cent.	Object of Loan.	Amount of Issue.	Date Payable.
Sect. 13, Chap. 516, Acts 1896.....	3 1/2	South Union Station.....	\$100,000	Oct. 1, 1903
March 16, 1898.....	3 1/2	Back Bay Fens, sewage.....	25,000	April 1, 1908
June 28, 1898.....	3 1/2	Bathing Establishment, Charles river.....	1,500	July 1, 1908
June 28, 1898.....	3 1/2	Buildings, etc., Long Island.....	2,500	July 1, 1908
June 28, 1898.....	3 1/2	Bath-house, Neponset river.....	2,500	July 1, 1908
June 28, 1898.....	3 1/2	Bathing Pool, etc., Cabot street.....	2,500	July 1, 1908
June 28, 1898.....	3 1/2	Swimming Pool, etc., Orchard park.....	2,500	July 1, 1908
June 27, 1898.....	3 1/2	New Buildings, City Hospital.....	38,500	July 1, 1908
June 13, 1898.....	3 1/2	Bathing Establishment, Ward 15.....	2,500	Oct. 1, 1908
Sect. 30, 1898.....	3 1/2	Various Municipal Purposes, Sept. 30, 1898.....	185,000	Oct. 1, 1908
Sept. 30, 1898.....	3 1/2	Various Municipal Purposes, Nov. 21, 1898.....	62,500	Oct. 1, 1908
Nov. 21, 1898.....	3 1/2	Street Improvements, general.....	22,000	Jan. 1, 1909
Dec. 31, 1898.....	3 1/2			
July 10, 1895, June 7, 1896, accepting Chap. 435, Acts 1895.....	3 1/2	New Ferry Landing.....	1,000	Jan. 1, 1918
Jan. 29, 1898.....	3 1/2	Wire Department.....	50,000	April 1, 1918
Feb. 21, 1898.....	3 1/2	Various Municipal Purposes, Feb. 21, 1898.....	224,000	April 1, 1918
July 10, 1895, June 7, 1896, accepting Chap. 435, Acts 1895.....	3 1/2			
June 14, 1898.....	3 1/2	New Ferry Landing.....	25,000	April 1, 1918
June 16, 1898.....	3 1/2	New Buildings, City Hospital.....	23,000	July 1, 1918
June 30, 1898.....	3 1/2	Fenutil Hall Buildings, reconstruction.....	80,000	July 1, 1918
June 30, 1898.....	3 1/2	Street Improvements, June 30, 1898.....	181,480	July 1, 1918
Chap. 470, Acts 1898.....	3 1/2	Library Building, Dartmouth street.....	100,000	Oct. 1, 1918
Aug. 3, 1898.....	3 1/2	Bridge, Lariat avenue, Ward 24.....	21,000	Oct. 1, 1918
Sect. 2, Chap. 323, Acts 1891.....	3 1/2	Laying Out and Construction of Highways.....	200,000	Oct. 1, 1918
Sept. 21, 1898.....	3 1/2	Evergreen Cemetery, wall.....	1,500	Oct. 1, 1918
Sept. 30, 1898.....	3 1/2	Various Municipal Purposes, Sept. 30, 1898.....	16,500	Oct. 1, 1918
Oct. 13, 1898.....	3 1/2	Washington street, between Grove Hall and Columbia road.....	4,500	Oct. 1, 1918
Feb. 3, 1898.....	3 1/2	Public Parks.....	50,000	April 1, 1923
Sect. 6, Chap. 426, Acts 1897.....	3 1/2	Sewerage Loan.....	500,000	July 1, 1923
Chap. 346, Acts 1897.....	3 1/2	Laying Out and Construction of Highways, Charlestown street.....	5,000	July 1, 1923
July 13, 1898.....	3 1/2	Chapel, Mt. Hope Cemetery.....	25,000	Oct. 1, 1923
Carried forward.....			\$1,954,980	

NEW DEBT ISSUED DURING FINANCIAL YEAR 1898-99. — *Concluded.*

Date of Order.	Rate per cent.	Object of Loan.	Amount of Issue.	Date Payable.
<i>Brought forward.</i>				
Sect. 4, Chap. 408, Acts 1895, {	3½	School-houses.....	\$1,954,980	Oct. 1, 1928
Sect. 1, Chap. 442, Acts 1897, {	3½	Laying Out and Construction of Highways.....	650,000	Oct. 1, 1928
Sect. 2, Chap. 323, Acts 1891, {	3½	Public Parks.....	606,000	Oct. 1, 1928
Sect. 1, Chap. 319, Acts 1898, {	3½	Sewerage Loan.....	450,000	Oct. 1, 1928
Sect. 1, Chap. 313, Acts 1898, {	3½	Laying Out and Construction of Highways.....	1,000,000	Oct. 1, 1928
Sect. 6, Chap. 436, Acts 1897, {	3½	Rapid Transit.....	650	Jan. 1, 1929
Sect. 2, Chap. 257, Acts 1898, {	3½	Blue Hill and other avenues.....	200,000	April 1, 1938
Sect. 1, Chap. 319, Acts 1897, {	3½	Market or other Public Purposes.....	209,000	July 1, 1938
Sect. 13, Chap. 500, Acts 1897, {	3½	Cambridge Bridge Loan.....	616,000	Oct. 1, 1938
Sect. 1, Chap. 226, Acts 1898, {	3½	Blue Hill and other avenues.....	50,000	Oct. 1, 1938
Sect. 2, Chap. 347, Acts 1897, {	3½	Extension of Mains, etc.....	541,000	Oct. 1, 1938
Sect. 11, Chap. 367, Acts 1898, {	3½		\$6,277,630	
Sect. 1, Chap. 236, Acts 1898, {	3½		200,000	
Nov. 22, 1898.....	3½		\$6,477,630	
Total Debt Issued ..				

STATEMENT OF THE CITY OF BOSTON FUNDED DEBT.

FROM CITY TREASURER'S BOOKS.

Exclusive of the LAYING OUT AND CONSTRUCTION OF HIGHWAYS, COUNTY AND WATER DEBTS, on the 31st day of January, 1899, classified according to the financial years in which it becomes due, viz. :

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
Feb. 4, 1860....	5	Matured	North street, Widening.....	\$1,000 00	Jan., 1874.	\$1,000 00
Aug. 9, 1877....	4	Matured	Improved Sewerage	\$143,850 00	Jan., 1899.	
Jan. 3, 1889....	4	"	Miscellaneous Purposes.....	128,000 00	"	
Feb. 16, 1889....	4	"	"	29,000 00	"	300,850 00
Aug. 9, 1877....	5	April and Oct.	Improved Sewerage	\$32,000 00	April, 1889.	
July 23, 1869....	5	Jan. and July	Fort Hill Improvement.....	868,191 74	July, ...	
Oct. 15, 1869....	5	"	Widening Hanover street, No. 2.....	600,000 00	"	
Mar. 18, 1889....	3½	"	Library Building, Dartmouth street	500,000 00	"	
Sept. 28, 1889....	3½	"	Miscellaneous Purposes.....	500,000 00	"	
Dec. 24, 1889 and Jan. 24, 1890....	3½	April and Oct.	"	1,037,000 00	Oct., ...	
Mar. 10, 1890....	4	Jan. and July	"	574,000 00	Jan., 1900.	4,111,191 74
Aug. 9, 1877....	4	April and Oct.	Improved Sewerage	\$1,250,000 00	April, 1900.	
Mar. 18, 1880....	5	Jan. and July	New Public Library, Dartmouth street	17,000 00	July, ...	
Mar. 18, 1880....	4	April and Oct.	"	297,000 00	Oct., ...	
Oct. 13, 1890....	4	"	Public Parks, Charlestown District	14,000 00	"	
Oct. 17, 1890....	4	"	Miscellaneous Purposes.....	200,000 00	"	
Aug. 9, 1877....	5	"	Improved Sewerage	670,000 00	"	
Aug. 27, 1891....	4	Jan. and July	Miscellaneous Purposes.....	18,000 00	"	
Mar. 18, 1889....	4	"	New Public Library, Dartmouth street	460,000 00	Jan., 1901.	
Aug. 3, 1877....	4	"	Improved Sewerage	189,000 00	"	
				24,000 00	"	3,139,000 00
Carried forward.....						\$7,552,041 74

STATEMENT OF THE CITY OF BOSTON FUNDED DEBT. — *Continued.*

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
Aug. 9, 1877.....	4	April and Oct.....	<i>Brought forward</i>			
Chap. 516, Acts of 1896.....	4	" ".....	Improved Sewerage.....	\$5,000 00	April, 1901.	\$7,552,041 74
Aug. 9, 1877.....	4	Jan. and July.....	" ".....	10,000 00	Oct., "	
Aug. 9, 1877.....	4	" ".....	South Union Station.....	25,000 00	Jan., 1902.	
Aug. 9, 1877.....	4	" ".....	Improved Sewerage.....	8,000 00	" "	48,000 00
Aug. 9, 1877.....	4	April and Oct.....	Improved Sewerage.....	\$317,000 00	April, 1902.	
Chap. 516, Acts of 1896.....	4	" ".....	" ".....	1,275,000 00	" "	
Aug. 9, 1877.....	4	Jan. and July.....	South Union Station.....	627,500 00	Oct., "	
Aug. 9, 1877.....	4	" ".....	Improved Sewerage.....	22,500 00	Jan., 1903.	
Chap. 516, Acts of 1896.....	3½	" ".....	" ".....	300,000 00	" "	
May 13, 1882.....	4	April and Oct.....	South Union Station.....	\$500,000 00	April, 1903.	2,542,000 00
Aug. 9, 1877.....	4	" ".....	Improved Sewerage.....	6,000 00	Oct., "	
May 13, 1882.....	4	" ".....	" ".....	245,000 00	" "	
Sept. 13, Chap. 516, Acts of 1896.....	3½	" ".....	" ".....		" "	
May 13, 1882.....	4	Jan. and July.....	South Union Station.....	100,000 00	" "	
May 13, 1882.....	4	" ".....	Improved Sewerage.....	500,000 00	Jan., 1904.	
May 13, 1882.....	4	Jan. and July.....	Improved Sewerage.....	\$97,000 00	July, 1904.	1,351,000 00
" ".....	4	April and Oct.....	" ".....	50,000 00	Oct., "	
" ".....	4	Jan. and July.....	" ".....	50,000 00	Jan., 1905.	
June 9, 1885.....	3½	Jan. and July.....	Improved Sewerage.....	\$100,000 00	July, 1905.	197,000 00
July 8, 1885.....	3	" ".....	Sewers, Roslindale.....	143,000 00	" "	
" ".....	3	" ".....	Sewers, Dorchester.....	118,000 00	" "	
" ".....	3	" ".....	Sewers, Brighton.....	48,000 00	" "	
June 9, 1885.....	3½	" ".....	Improved Sewerage.....	50,000 00	Jan., 1906.	459,000 00

STATEMENT OF THE CITY OF BOSTON FUNDED DEBT. — *Continued.*

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
May 24, 1892.....	4	April and Oct.	<i>Brought forward.</i>			
Sept. 30, 1892.....	4	Jan. and July	Various Municipal Purposes, 1892.....	\$1,599,725 00	April, 1912.	\$16,537,341 74
Aug. 24, 1892.....	4	"	Buildings, Gallop's Island and Swett street	50,000 00	July, "	
Oct. 7, 1892.....	4	"	New Lunatic Hospital.....	200,000 00	"	
" " " ".....	4	"	Laying-out Streets Department	25,000 00	Oct., "	
Dec. 16, 1891.....	4	April and Oct.	City Hospital, Additional Land	42,000 00	"	
Dec. 24, 1891.....	4	Jan. and July	West Roxbury Park.....	233,000 00	Jan., 1913.	
Dec. 28, 1891.....	4	"	East Boston Park.....	50,000 00	"	
" " " ".....	4	"	Arnold Arboretum	60,000 00	"	
Dec. 16, 1891.....	4	April and Oct.	West Roxbury Park.....	\$300,000 00	April, 1913.	2,259,725 00
Dec. 24, 1891.....	4	"	Charles-river Embankment	285,000 00	"	
" " " ".....	4	"	City Point Park.....	100,000 00	"	
" " " ".....	4	"	Muddy River Improvement	119,000 00	"	
April 17, 1893.....	4	"	City Point Park.....	109,000 00	"	
June 26, 1893.....	4	"	Widening Essex and Lincoln streets	260,500 00	"	
July 10, 1893.....	4	"	Various Municipal Purposes, 1893.....	2,514,100 00	"	
Oct. 23, 1893.....	4	"	Stony Brook Damages.....	50,000 00	Oct., "	
Jan. 4, 1894.....	4	Jan. and July	West Roxbury Park.....	500,000 00	Jan., 1914.	
Dec. 29, 1893.....	4	"	Commonwealth-avenue Extension	50,000 00	"	
Dec. 24, 1891.....	4	April and Oct.	Muddy River Improvement	\$75,000 00	April, 1914.	4,267,600 00
April 26, 1894.....	4	Jan. and July	Improved Sewerage.....	50,000 00	July, "	
Dec. 29, 1893.....	4	"	Commonwealth-avenue Extension	100,000 00	"	
" " " ".....	4	"	" " " ".....	100,000 00	Oct., "	
July 12, 1894.....	4	April and Oct.	Various Municipal Purposes, 1894.....	599,800 00	"	
Jan. 1, 1894.....	4	"	Crushed Stone for Street Improvements	50,000 00	"	
Feb. 1, 1894.....	4	"	Schools.....	250,000 00	"	
Feb. 1, 1894.....	4	"	Public Parks.....	500,000 00	"	
Jan. 28, 1895.....	4	April and Oct.	Improved Sewerage.....	\$67,650 00	April, 1915.	1,724,800 00
Mar. 16, 1895.....	4	"	New Lunatic Hospital, Furnishing	10,000 00	"	
July 12, 1894.....	4	"	Parental School for Boys.....	5,000 00	"	
" " " ".....	4	"	Various Municipal Purposes, 1894	213,000 00	"	

TREASURY DEPARTMENT.

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Jan. 4, 1895.....	4	"	"	"	Jan. 4, 1895.....	17,000 00	"	"
April 22, 1895.....	4	"	"	"	April 22, 1895.....	137,000 00	"	"
Nov. 14, 1895.....	31	"	"	"	"	16,000 00	Oct.,	"
Feb. 1, 1894.....	31	"	"	"	Charles-river Embankment.....	13,000 00	"	"
Sept. 27, 1893.....	4	"	"	"	City Point Park.....	300,000 00	"	"
July 12, 1894.....	4	"	"	"	New Buildings, City Hospital.....	50,000 00	"	"
Jul. 4, 1895.....	4	"	"	"	House of Industry, Alterations and Additions.....	87,000 00	"	"
April 22, 1895.....	4	"	"	"	Parental School, New Buildings and Furnishing.....	155,000 00	"	"
July 9, 1895.....	4	"	"	"	Various Municipal Purposes, 1894.....	121,000 00	"	"
July 9, 1895.....	4	"	"	"	"	1,115,200 00	Jan., 1916.	"
Jul. 4, 1896.....	4	"	"	"	"	500 00	"	"
July 9, 1895.....	4	"	"	"	Various Municipal Purposes, July 9, 1895.....	44,000 00	"	"
Jul. 4, 1896.....	4	"	"	"	Library Building, Dartmouth street, Furnishing.....		"	"
July 9, 1895.....	4	"	"	"	Various Municipal Purposes, July 9, 1895.....	\$3,000 00	April, 1916.	"
April 24, 1896.....	31	"	"	"	Bussey Park and Arboretum.....	4,000 00	"	"
June 12, 1896.....	31	"	"	"	Arnold Arboretum.....	16,000 00	"	"
July 9, 1895.....	4	"	"	"	Various Municipal Purposes, July 9, 1895.....	438,500 00	July,	"
Mar. 13, 1896.....	4	"	"	"	Wire Department.....	50,000 00	"	"
May 5, 1896.....	4	"	"	"	Sewer Outlet, South Boston.....	25,000 00	"	"
Dec. 31, 1895.....	4	"	"	"	Sidewalk Assessments, Repayment of.....	100,000 00	"	"
June 15, 1896.....	4	"	"	"	Public Bath-house.....	1,000 00	"	"
Oct. 5, 1896.....	4	"	"	"	Connection with Metropolitan Sewer, East Boston.....	64,000 00	Oct.,	"
June 7, 1896.....	4	"	"	"	Sewer Outlet, Porter street, East Boston.....	25,000 00	"	"
July 3, 1896.....	4	"	"	"	New Ferry Landing.....	16,000 00	"	"
Oct. 22, 1896.....	31	"	"	"	Various Municipal Purposes, July 3, 1896.....	25,000 00	"	"
Nov. 4, 1896.....	4	"	"	"	Charles-river Embankment.....	103,500 00	"	"
June 30, 1896.....	4	"	"	"	Various Municipal Purposes, Nov. 4, 1896.....	55,000 00	Nov.,	"
Jan. 1, 1897.....	31	"	"	"	School Buildings, Improvements in.....	223,500 00	Jan., 1917.	"
June 1, 1896.....	4	"	"	"	Commonwealth avenue.....	40,500 00	"	"
Jan. 1, 1896.....	4	"	"	"	New Ferry Landing.....	300,000 00	"	"
Nov. 4, 1896.....	4	"	"	"	Various Municipal Purposes, Nov. 4, 1896.....	50,000 00	"	"
June 4, 1897.....	31	"	"	"	Public Park Lands.....	\$3,000 00	April, 1917.	"
Nov. 4, 1896.....	4	"	"	"	Various Municipal Purposes, Nov. 4, 1896.....	400,000 00	July,	"
Nov. 16, 1897.....	4	"	"	"	Wire Department.....	254,000 00	"	"
July 16, 1895.....	4	"	"	"	New Ferry Landing.....	50,000 00	"	"
June 17, 1896.....	4	"	"	"	Fire Boat.....	5,000 00	"	"
Chap. 435, Acts 1896.....	4	"	"	"	Carried forward.....	16,000 00	"	"
Dec. 22, 1896.....	31	"	"	"		\$728,000 00		
								\$28,784,316 74

2,439,850 00

1,555,000 00

STATEMENT OF THE CITY OF BOSTON FUNDED DEBT. — *Continued.*

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
Jan. 1, 1897.....	3½	Jan. and July....	<i>Brought forward</i>	\$728,000 00		\$28,784,316 74
Feb. 15, 1897.....	3½	" " " ".....	Mass. Historical Society Building.....	25,000 00	July, 1917.	
June 1, 1897.....	3½	" " " ".....	Parental School, New Buildings and Furnishing.....	7,000 00	" "	
July 13, 1897.....	3½	" " " ".....	House of Industry, Deer Island, Alterations and Additions.....	20,000 00	" "	
June 13, 1897.....	4	April and Oct.	Various Municipal Purposes, June 18, 1897.....	162,500 00	" "	
June 18, 1897.....	3½	" " " ".....	Stony Brook Improvement.....	500,000 00	Oct.,	
June 16, 1895.....	4	" " " ".....	New Bridge to Cambridge.....	250,000 00	" "	
June 7, 1896.....	4	" " " ".....	Various Municipal Purposes, June 18, 1897.....	164,000 00	" "	
Chap. 435, Acts 1895.....	4	" " " ".....	New Ferry Landing.....	5,000 00	" "	
Sept. 24, 1897.....	3½	" " " ".....	School Buildings, Improvements in.....	100,000 00	" "	
Jan. 4, 1887.....	4	Jan. and July....	Public Park Construction.....	450,000 00	Jan., 1918.	2,643,300 00
Feb. 10, 1887.....	3½	" " " ".....	Various Municipal Purposes, Oct. 29, 1897.....	27,000 00	" "	
Dec. 30, 1887.....	3½	" " " ".....	Nurses' Home Site, Furnishing, etc.	101,000 00	" "	
Oct. 29, 1897.....	3½	" " " ".....	New Ferry Landing.....	102,800 00	" "	
April 6, 1897.....	3½	" " " ".....	" " " ".....	1,000 00	" "	
July 10, 1895.....	3½	" " " ".....	Wire Department.....	\$50,000 00	April, "	
June 7, 1896.....	3½	" " " ".....	Various Municipal Purposes, February 21, 1888.....	224,000 00	" "	
Chap. 435, Acts 1895.....	3½	" " " ".....	New Ferry Landing.....	25,000 00	" "	
Chap. 435, Acts 1895.....	3½	" " " ".....	Public Park Construction.....	5,000 00	" "	
Jan. 29, 1898.....	3½	April and Oct.				
Feb. 21, 1898.....	3½	" " " ".....				
July 10, 1895.....	3½	" " " ".....				
June 7, 1896.....	3½	" " " ".....				
Chap. 435, Acts 1896.....	4	" " " ".....				
Jan. 4, 1887.....	4	" " " ".....				
Feb. 10, 1887.....	4	" " " ".....				
Dec. 31, 1887.....	4	" " " ".....				

" "	Jan. and July.	" "	" "	" "	July,	" "
4	Jan. 14, 1898....	"	New Building, City Hospital	.....	5,000 00	"
31	June 16, 1898....	"	Faneuil Hall Building, Reconstruction	.....	92,000 00	"
34	June 30, 1898....	"	Street Improvements, June 30, 1898	.....	80,000 00	"
34	Chap. 475, Acts 1898....	"	Library Building, Dartmouth street	.....	181,480 00	"
31	Aug. 9, 1898....	"	Bridge, Lauriat Avenue, Ward 24	.....	100,000 00	Oct.
31	Sept. 21, 1898....	"	Evergreen Cemetery, Wall	.....	21,000 00	"
31	Sept. 30, 1898....	"	Various Municipal Purposes, September 30, 1898	.....	11,500 00	"
31	Oct. 19, 1898....	"	Washington street, between Grove Hall and Columbia road	.....	16,500 00	"
31	Jan. 4, 1897....	"	Public Park Construction	.....	4,300 00	"
4	Feb. 10, 1887....	"	Public Park Construction	.....	40,000 00	"
4	Dec. 31, 1887....	"	Public Park Construction	.....	480,500 00	Jan., 1919.
4	Jan. 4, 1887....	"	Public Park Construction	.....	\$16,000 00	April, 1919.
4	Feb. 10, 1887....	"	Improved Sewerage	.....	3,500 00	July, " "
31	Sept. 14, 1889....	"	Public Park Construction	.....	500,000 00	"
4	Feb. 10, 1887....	"	Public Park Lands	.....	438,500 00	Jan., 1920.
31	Dec. 31, 1887....	"	Public Park Construction	.....	600,000 00	"
4	Jan. 4, 1887....	"	Public Park Construction	.....	\$16,400 00	"
4	Dec. 31, 1887....	"	Public Parks	.....	44,100 00	Oct., " "
4	Jan. 4, 1887....	"	Public Parks	.....	500,000 00	Jan., 1921.
4	Feb. 10, 1887....	"	Public Parks	.....	\$700,000 00	June, 1921.
4	May 20, 1891....	"	Public Parks	.....	\$200,000 00	April, 1922.
4	Oct. 24, 1891....	"	Library Building, Dartmouth street	.....	301,000 00	Oct., " "
4	May 20, 1891....	"	Public Parks	.....	175,000 00	"
4	Oct. 24, 1891....	"	Library Building, Dartmouth street	.....	250,000 00	Jan., 1923.
4	May 20, 1891....	"	Public Parks	.....	200,000 00	"
4	Oct. 24, 1891....	"	Library Building, Dartmouth street	.....	\$500,000 00	July, 1923.
4	May 20, 1891....	"	Public Parks	.....	450,000 00	Oct., " "
4	Oct. 24, 1891....	"	Library Building, Dartmouth street	.....	325,000 00	"
4	May 20, 1891....	"	Public Parks	.....	99,000 00	Jan., 1924.
Carried forward.....					1,257,480 00	
					1,559,000 00	
					560,500 00	
					700,000 00	
					1,126,000 00	
					1,374,000 00	
					\$88,004,536 74	

STATEMENT OF THE CITY OF BOSTON FUNDED DEBT. — *Continued.*

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
May 17, 1893.....	4	Jan. and July....	<i>Brought forward</i>			\$38,004,596 74
" " " ".....	4	April and Oct....	Public Parks, Wards 6 and 7.....	\$100,000 00	July, 1924.	
Oct. 24, 1891.....	4	" " " ".....	" " " ".....	100,000 00	Oct. " "	
May 20, 1891.....	4	" " " ".....	Library Building, Dartmouth street.....	100,000 00	" " "	
Oct. 23, 1893.....	4	" " " ".....	" " " ".....	1,000,000 00	" " "	
June 8, 1894.....	4	Jan. and July....	Public Parks.....	1,000,000 00	Jan. 2, 1925.	
Oct. 24, 1891.....	4	" " " ".....	" " " ".....	49,500 00	" 1, " "	
			Library Building, Dartmouth street.....			
May 17, 1893.....	4	April and Oct....	Public Park, Wards 6 and 7.....	\$50,000 00	April, 1925.	2,349,500 00
Oct. 24, 1891.....	4	" " " ".....	" " " ".....	208,000 00	Oct. " "	
			Library Building, Dartmouth street.....	150,500 00		
Chap. 408, Acts of 1895.....	4	Jan. and July....	School-houses.....	\$500,000 00	July, 1926.	
May 17, 1893.....	4	" " " ".....	Public Park, Wards 6 and 7.....	11,300 00	" " "	
Chap. 453, Acts of 1896.....	3½	" " " ".....	Public Parks.....	500,000 00	Jan., 1927.	
Chap. 408, Acts of 1895.....	4	Jan. and July....	School-houses.....	\$150,000 00	July, 1927.	
Chap. 453, Acts of 1896.....	4	April and Oct....	Public Park Loan.....	50,000 00	Oct. " "	
Chap. 408, Acts of 1895.....	3½	Jan. and July....	School-houses.....	500,000 00	Jan., 1928.	
Chap. 442, Acts of 1897.....	3½	" " " ".....	Sewerage Loan.....	500,000 00	" " "	
Chap. 426, Acts of 1897.....	3½	" " " ".....	Public Park Loan.....	450,000 00	" " "	
Chap. 453, Acts of 1896.....	3½	April and Oct....	Public Park Loan.....	\$50,000 00	April, 1928.	1,650,000 00
Feb. 9, 1893.....	3½	Jan. and July....	Sewerage Loan.....	500,000 00	July, " "	

July 13, 1888..... Sect. 4, Chap. of 408, Acts of 1885.....	3½	April and Oct....	Chapel, Mt. Hope Cemetery.....	25,000 00	Oct., "	
Sect. 1, Chap. 442, Acts of 1887.....	3½	"	School-houses.....	650,000 00	"	
Sect. 1, Chap. 313, Acts of 1888.....	3½	"	Public Park Loan.....	450,000 00	"	
Sect. 6, Chap. 426, Acts of 1887.....	3½	"	Sewerage Loan.....	1,000,000 00	"	
Sect. 2, Chap. 257, Acts of 1888.....	4	April and Oct....	Charlestown Bridge.....	\$10,000 00	Oct., 1884.	2,675,000 00
July 2, 1894..... Chap. 548, Acts of 1894.....	4	"	Rapid Transit.....	50,000 00	"	60,000 00
Chap. 548, Acts of 1894.....	4	April and Oct....	Rapid Transit.....	\$1,000,000 00	April, 1885.	
Chap. 408, Acts of 1895.....	4	Jan. and July....	School-houses.....	500,000 00	July, "	
May 11, 1895.....	4	"	Blue Hill and other avenues.....	1,000,000 00	"	
Chap. 348, Acts of 1894.....	4	April and Oct....	Charlestown Bridge.....	10,000 00	Oct., 1885.	
Chap. 348, Acts of 1894.....	3½	Jan. and July....	Rapid Transit.....	250,000 00	Jan., 1886.	2,760,000 00
Chap. 548, Acts of 1894.....	3½	April and Oct....	Rapid Transit.....	\$500,000 00	April, 1886.	
May 11, 1895.....	4	Jan. and July....	Blue Hill and other avenues.....	1,000,000 00	July, "	
Chap. 548, Acts of 1894.....	4	"	Charlestown Bridge.....	30,000 00	"	
Chap. 548, Acts of 1894.....	4	April and Oct....	"	100,000 00	Oct., "	
Chap. 348, Acts of 1894.....	3½	"	Rapid Transit.....	1,500,000 00	"	
July 13, 1896.....	4	"	Stony Brook Improvement.....	100,000 00	"	
May 11, 1895.....	3½	Jan. and July....	Blue Hill and other avenues.....	500,000 00	Jan., 1887.	
Jan. 4, 1887... } Feb. 10, 1887... }	3½	"	Public Park Construction.....	500,000 00	"	4,230,000 00
<i>Carried forward.....</i>						\$53,148,896 74

STATEMENT OF THE CITY OF BOSTON FUNDED DEBT. — *Concluded.*

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
July 13, 1896, Chap. 530, Acts	3½	Jan. and July....	<i>Brought forward</i> Stony Brook Improvement Scrip.....	 \$300,000 00	 July, 1937.	\$53,148,896 74
Chap. 548, Acts of 1894.....	3½	" " " " " "	Rapid Transit.....	1,000,000 00	" " " "	
Chap. 548, Acts of 1894.....	3½	" " " " " "	Charlestown Bridge.....	500,000 00	" " " "	
Chap. 548, Acts of 1894.....	3½	" " " " " "	" " " " " "	300,000 00	Jan., 1938.	
Chap. 548, Acts of 1894.....	3½	" " " " " "	Rapid Transit.....	200,000 00	" " " "	
July 13, 1896, Chap. 530, Acts	3½	" " " " " "	Stony Brook Improvement Scrip.....	100,000 00	" " " "	2,400,000 00
of 1896.....	3½	" " " " " "				
Sect. 37, Chap. 548, Acts of 1894.....	3½	April and Oct....	Rapid Transit.....	\$200,000 00	April, 1938.	
Sect. 18, Chap. 500, Acts of 1897.....	3½					
Sect. 1, Chap. 236, Acts of 1898.....	3½	Jan. and July....	Blue Hill and other avenues.....	209,000 00	July, " "	
Sect. 2, Chap. 347, Acts of 1897.....	3½	April and Oct....	Market or other Public Purposes.....	616,000 00	Oct., " "	
Sect. 11, Chap. 467, Acts of 1898.....	3½	" " " " " "	Cambridge Bridge Loan.....	50,000 00	" " " "	
Sect. 1, Chap. 236, Acts of 1898.....	3½	" " " " " "	Blue Hill and other avenues.....	541,000 00	" " " "	1,616,000 00
						\$57,164,896 74

STATEMENT OF DEBT ISSUED UNDER AUTHORITY OF CHAPTER 323, ACTS OF 1891. — *Concluded.*

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
Oct. 24, 1896, Chap. 323, Acts of 1891.....	4	Jan. and July....	<i>Brought forward</i>.....	.....	.....	\$3,350,000 00
Chap. 418, Acts of 1892.....			Laying Out and Construction of Highways.....	\$150,000 00	July, 1917.	150,000 00
Chap. 323, Acts of 1891.....			" " " " " "	\$200,000 00	Oct. 1, 1918.	200,000 00
Chap. 319, Acts of 1897.....	3½	Jan. and July....	" " " " " "	\$750,000 00	Jan., 1928.	750,000 00
Chap. 346, Acts of 1897.....			" " " " " "	\$5,000 00	July, 1928.	
Chap. 323, Acts of 1891.....			" " " " " " (Charlestown street).	606,000 00	Oct., 1928.	611,000 00
Chap. 319, Acts of 1898.....	3½	Jan. and Oct....	" " " " " "			
Chap. 319, Acts of 1898.....			" " " " " "	\$650 00	Jan., 1929.	650 00
Chap. 319, Acts of 1898.....			" " " " " "			\$5,061,650 00

STATEMENT OF COUNTY OF SUFFOLK FUNDED DEBT, JANUARY 31, 1899.
FROM CITY TREASURER'S BOOKS.

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
Sept. 16, 1885....	3	April and Oct....	COUNTY OF SUFFOLK FUNDED DEBT. Suffolk County Court-House Miscellaneous Suffolk County Court-House..... Suffolk County Court-House..... Suffolk County Court-House..... Suffolk County Court-House, Furnishing Suffolk County Court-House, Furnishing Suffolk County Court-House..... Suffolk County Court-House..... Suffolk County Court-House Suffolk County Court-House..... Suffolk County Court-House.....	1 \$225,000 00	Jan., 1899.	\$623,000 00
Feb. 16, 1889....	4	Matured.....		\$41,000 00	Oct., 1918.	41,000 00
July 5, 1888... { Sept. 29, 1888... }	4	April and Oct....		\$700,000 00	Oct., 1919.	700,000 00
Jan. 3, 1890....	3½	"		\$800,000 00	July, 1922.	800,000 00
Aug. 25, 1892....	4	Jan. and July....		\$305,000 00	"	406,000 00
July 11, 1892....	4	"		100,000 00	Oct., 1923.	75,000 00
Oct. 27, 1893....	4	April and Oct....		\$75,000 00	July, 1924.	40,000 00
July 6, 1894....	4	Jan. and July....		\$40,000 00	April, 1937.	800,000 00
May 20, 1887....	3½	April and Oct....		\$300,000 00	July, 1938.	100,000 00
July 5, 1888....	3½	Jan. and July....		\$100,000 00		
						\$3,591,000 00

¹ Payable \$17,000, yearly in October, to 1935, inclusive.

TREASURY DEPARTMENT.

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Feb. 26, 1875....	5	April and Oct.	Additional Supply of Water.	1,000,000 00	Oct., 1905.
April 30, 1875....	6	" " " " " " " "	Water-Works, Wards 17 and 19.	6,000 00	" " " "
April 30, 1875....	6	Jan. and July.	" " " " " " " "	50,300 00	Jan., 1906.
Dec. 31, 1875....	6	" " " " " " " "	" " " " " " " "	32,250 00	" " " "
Dec. 31, " " " "	5	April and Oct.	Water-Works, Wards 17 and 19.	\$100,000 00	April, " "
Feb. 26, " " " "	6	" " " " " " " "	Additional Supply of Water.	8,750 00	" " " "
Dec. 31, " " " "	5	" " " " " " " "	Water-Works, Wards 17 and 19.	452,000 00	" " " "
July 1, 1876....	5	" " " " " " " "	Additional Supply of Water.	4,000 00	Oct., " "
Dec. 31, 1875....	6	Jan. and July.	Water-Works, Wards 17 and 19.	2,000,000 00	" " " "
" " " " " " " "	6	April and Oct.	Water-Works, Wards 17 and 19.	8,000 00	Jan., 1907.
" " " " " " " "	6	Jan. and July.	" " " " " " " "	\$5,000 00	April, " "
" " " " " " " "	6	April and Oct.	" " " " " " " "	1,000 00	July, " "
" " " " " " " "	5	April and Oct.	" " " " " " " "	1,000 00	Oct., " "
April 20, 1878....	4	" " " " " " " "	Additional Supply of Water.	\$588,000 00	April, 1908.
" " " " " " " "	5	" " " " " " " "	" " " " " " " "	12,000 00	" " " "
April 11, 1879....	4	Jan. and July.	Additional Supply of Water.	\$82,000 00	July, 1909.
" " " " " " " "	4½	April and Oct.	" " " " " " " "	288,000 00	Oct., " "
Mar. 20, 1880....	4	" " " " " " " "	New Main.	\$280,000 00	April, 1910.
Aug. 17, 1881....	4	" " " " " " " "	Additional Supply of Water.	\$324,000 00	April, 1912.
Mar. 3, 1883....	4	Jan. and July.	New Main.	\$61,000 00	July, 1913.
June 2, " " " "	4	" " " " " " " "	Introduction of Meters and Inspection.	50,000 00	" " " "
" " " " " " " "	4	April and Oct.	Additional Supply of Water.	336,000 00	Oct., " "
Jan. 4, 1884....	4	Jan. and July.	Introduction of Meters and Inspection.	250,000 00	Jan., 1914.
June 2, 1883....	4	" " " " " " " "	" " " " " " " "	7,000 00	" " " "
" " " " " " " "	4	" " " " " " " "	Additional Supply of Water.	209,000 00	Jan., 1914.
" " " " " " " "	4	April and Oct.	Additional Supply of Water.	\$18,500 00	April, " "
" " " " " " " "	4	Jan. and July.	High Service.	16,000 00	Oct., " "
Dec. 23, 1884....	4	" " " " " " " "	" " " " " " " "	50,000 00	Jan., 1915.
			Carried forward.....		
				\$11,458,773 98	

STATEMENT OF COCHITUATE WATER DEBT. — *Concluded.*

Dates of Orders of Loans.	Interest.		Objects of the Loans.	Amounts of Loans.	When Due.	Total for Financial Years.
	Rate.	When Due.				
Dec. 23, 1884....	4	April and Oct. ...	<i>Brought forward.</i>	.....	.....	\$11,453,773 98
June 2, 1883....	4	" " " " " "	High Service.....	\$144,200 00	April, 1915.	
Mar. 5, 1885....	3½	" " " " " "	Additional Supply of Water	1,500 00	" " " " " "	
" " " " " "	3½	" " " " " "	Extension of Mains.....	50,000 00	" " " " " "	
Dec. 23, 1884....	4	" " " " " "	" " " " " "	50,000 00	Oct., " " " " "	
Mar. 5, 1885....	3½	Jan. and July....	High Service.....	23,000 00	" " " " " "	
Dec. 23, 1884....	4	" " " " " "	Extension of Mains, etc.	100,000 00	Jan., 1916.	
" " " " " "	4	" " " " " "	High Service.....	55,000 00	" " " " " "	
Oct. 14, " " " " " "	4	April and Oct.	High Service.....	\$28,500 00	April, " " " " "	426,700 00
April 17, " " " " " "	3½	" " " " " "	Additional Supply of Water	100,000 00	" " " " " "	
" " " " " "	3½	Jan. and July....	Extension of Mains, etc.	75,000 00	July, " " " " "	
Oct. 14, 1884....	4	April and Oct.	" " " " " "	25,000 00	Oct., " " " " "	
Dec. 23, " " " " " "	4	" " " " " "	Additional Supply of Water	50,000 00	" " " " " "	
" " " " " "	4	Jan. and July....	High Service.....	236,300 00	" " " " " "	
" " " " " "	4	" " " " " "	" " " " " "	21,000 00	Jan., 1917.	
Jan. 1, 1887....	3	April and Oct.	High Service.....	\$161,000 00	April, " " " " "	535,800 00
May 23, " " " " " "	3½	" " " " " "	Extension of Mains, etc.	200,000 00	" " " " " "	
" " " " " "	3½	" " " " " "	Additional Supply of Water	35,000 00	" " " " " "	
" " " " " "	3½	" " " " " "	Improvement of Lake Cochituate	40,000 00	" " " " " "	
" " " " " "	3½	" " " " " "	Protection of Water Supply	50,000 00	" " " " " "	
Dec. 23, 1884....	4	Jan and July....	Extension of Mains, etc.	150,000 00	" " " " " "	
" " " " " "	4	April and Oct.	High Service.....	7,000 00	July, " " " " "	
Oct. 15, 1887....	4	Jan. and July....	" " " " " "	10,700 00	Oct., " " " " "	
Dec. 23, 1884....	4	" " " " " "	Extensions of Mains, etc.	150,000 00	" " " " " "	
" " " " " "	4	Jan. and July....	High Service.....	20,000 00	Jan., 1918.	
June 4, 1888....	3½	April and Oct.	High Service.....	\$6,300 00	April, " " " " "	823,700 00
Sept. 23, " " " " " "	4	Jan. and July....	Extension of Mains, etc.	100,000 00	July, " " " " "	
" " " " " "	4	April and Oct.	" " " " " "	100,000 00	Oct., " " " " "	206,300 00

STATEMENT OF THE INDEBTEDNESS OF THE CITY OF BOSTON.

The Total Amount of the Funded Debt of the City, County and Water Debt, January 31, 1899, was \$82,938,820.72, made up of the following items:

City Debt:		
City Debt Proper.....	\$35,344,746 74	
Overdue and unpaid.....	301,850 00	
Charlestown Bridge (Rapid Transit).....	950,000 00	
Laying-Out and Construction of Highways.....	5,061,650 00	
Blue Hill and other avenues.....	3,250,000 00	
Rapid Transit.....	4,700,000 00	
Public Parks.....	12,618,300 00	
County of Suffolk, Debt.....	\$3,550,000 00	\$62,226,546 74
County Debt, overdue and unpaid.....	41,000 00	
Water Debt.....		3,591,000 00
		17,121,273 98
Total Funded Debt.....		\$82,938,820 72
Total Funded Debt as above.....		\$82,938,820 72
Less Sinking Funds as follows:		\$82,938,820 72
Consolidated Street Improvement.....	\$2,162,594 15	
New Public Library, Special.....	730,654 08	
Twenty-year.....	5,989,732 24	
Ten-year.....	3,360,435 34	
Public Park.....	1,033,814 42	
Public Park, Special.....	1,849,812 48	
New Cambridge Bridge.....	73,185 00	
Stony Brook Improvement.....	151,498 00	
Improved Sewerage, Special.....	227,835 01	
New Ferry Landing.....	12,261 86	
Laying-Out and Construction of Highways.....	771,784 61	
Rapid Transit.....	283,913 08	
Rapid Transit, Charlestown Bridge, No. 1.....	39,014 25	
Rapid Transit, Charlestown Bridge, No. 2.....	14,760 67	
Blue Hill and other avenues.....	264,829 74	
School-houses, No. 1.....	20,820 96	
School-houses, No. 2.....	100,619 98	
South Union Station.....	377,917 08	
Suffolk County Court-House.....	486,788 98	
Sewerage Loan.....	72,406 89	
Cochituate Water.....	9,487,119 88	
		27,511,798 65
Less in hands of City Treasurer to redeem matured debt.....		\$55,427,022 07
		342,850 00
Net debt January 31, 1899.....		\$55,084,172 07
Divided as follows:		
City debt Proper.....	\$29,339,821 80	
Rapid Transit Debt.....	4,416,086 97	
Rapid Transit, Charlestown Bridge Debt.....	896,225 08	
County Suffolk Debt.....	3,063,211 02	
Water Debt.....	7,634,154 10	
Public Parks.....	9,734,673 10	
		\$55,084,172 07

INTEREST PAYABLE ON FUNDED DEBT DURING FINANCIAL YEAR 1899-1900.

CLASS OF LOANS.	1899. April.	1899. May.	1899. June.	1899. July.	1899. Oct.	1899. Nov.	1899. Dec.	1900. Jan.	Totals.
City Proper...	\$459,770	\$4,470	\$14,000	\$386,219	\$68,073	\$4,470	\$14,000	\$365,719	\$1,719,721
Laying-Out and Construction of Highways....	23,104	.....	1,000	68,592	26,485	.....	1,000	68,593	188,774
Blue Hill and other avenues.....	7,193	.....	.....	52,407	9,467	.....	.....	52,407	121,474
Rapid Transit.....	59,500	.....	.....	25,375	59,500	.....	.....	25,375	169,750
Sewerage Loan.....	13,296	.....	.....	17,500	17,500	.....	.....	17,500	65,796
County of Suffolk.....	52,935	.....	.....	10,670	52,935	.....	.....	10,670	127,210
Consolidated Street Improvement, Sterling Loan..	.....	.....	.....	* 98,000	.....	.....	.....	.....	98,000
Cochituate Water.....	\$615,798	\$4,470	\$15,000	\$658,763	\$633,960	\$4,470	\$15,000	\$543,264	\$2,490,725
Cochituate Water, Sterling Loan.....	281,295	2,275	.....	67,749	273,721	2,275	.....	67,749	695,064
	* 48,938	.....	.....	.....	* 48,938	.....	.....	.....	97,876
	\$946,081	\$6,745	\$15,000	\$726,512	\$956,619	\$6,745	\$15,000	\$611,013	\$3,283,665

* Interest payable in London.

TOTAL RECEIPTS AND PAYMENTS OF TREASURY DEPARTMENT FOR SEVENTEEN YEARS SIX AND A HALF MONTHS.

Statement of the Receipts and Payments made during the Administration of the office of City Treasurer, by Alfred T. Turner, from July 16, 1881, to January 31, 1899, both inclusive, — seventeen years six and a half months, with a recapitulation on page 35, viz.:

Year.	Balance on hand.	Receipts.	Payments.	Total Receipts and Payments.
1881-82	At commencement of first year in office, July 16, 1881: \$981,918 71 At the commencement of each financial year:	\$15,769,449 12	\$14,686,058 76	\$30,455,507 88
1882-83	\$2,065,309 07	20,632,553 78	20,133,849 30	40,766,403 08
1883-84	2,564,013 55	22,952,591 92	21,482,406 12	44,434,998 04
1884-85	4,034,199 35	19,164,994 71	19,870,230 82	39,035,225 53
1885-86	3,328,963 24	18,897,230 39	19,207,390 10	38,104,620 49
1886-87	3,018,803 53	20,601,313 60	19,539,436 04	40,140,749 64
1887-88	4,080,681 09	20,411,011 08	20,702,358 96	41,113,370 04
1888-89	3,789,333 21	22,940,943 25	23,671,438 95	46,612,382 20
1889-90	3,058,837 51	25,075,514 96	22,903,033 20	47,978,548 16
1890-91	5,231,319 27	22,296,312 93	22,574,312 36	44,870,625 29
(Nine months, May 1, 1891, to Jan. 31, 1892.				
1891-92	4,953,319 84	19,696,853 37	21,549,375 42	41,246,228 79
1892-93	3,100,797 79	29,083,217 95	29,965,097 07	59,048,315 02
1893-94	2,218,918 67	37,598,979 09	36,844,214 19	74,443,193 28
1894-95	2,973,688 57	32,833,603 12	32,400,898 96	65,234,502 08
1895-96	3,406,387 73	32,637,998 28	32,497,606 34	65,135,604 62
1896-97	3,546,779 67	36,742,624 80	35,495,554 26	72,238,179 06
1897-98	4,793,850 21	37,600,127 68	38,299,625 23	75,899,752 91
1898-99	4,094,352 66	40,587,085 24	40,203,678 34	80,790,763 58
		\$475,522,405 27	\$472,026,564 42	\$947,548,969 69
Cash balance, July 16, 1881.....				\$981,918 71
Receipts, July 16, 1881, to January 31, 1899				475,522,405 27
				\$476,504,323 98
Payments, July 16, 1881, to January 31, 1899.....				472,026,564 42
				\$4,477,759 56

Recapitulation of the Receipts and Payments for Seventeen Years six and one-half months ending January 31, 1899, during the term of Alfred T. Turner, City Treasurer, from July 16, 1881, to January 31, 1899.

CITY AND COUNTY.

Receipts.	Payments.
<u>\$475,522,405 27</u>	<u>\$472,026,564 42</u>

Board of Commissioners of the Sinking Funds, receipts and payments during the same period.

Receipts.	Payments.
<u>\$100,669,708 03</u>	<u>\$98,376,167 58</u>

Total Transactions, City, County, and Sinking Funds, seventeen years six and a half months, }	Receipts . . .	\$576,192,113 30
	Payments . . .	570,402,732 00

Total	\$1,146,594,845 30
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RECAPITULATION.

Cash balance, July 16, 1881, City and County account	\$981,918 71
Cash balance, July 16, 1881, Sinking Funds account	1,365,928 20
	<u>\$2,347,846 91</u>
Total receipts, City and County account and Sinking Funds account, July 16, 1881, to January 31, 1899	\$576,192,113 30
Total payments, City and County account and Sinking Funds account, July 16, 1881, to January 31, 1899	570,402,732 00
	<u>5,789,381 30</u>
	<u>\$8,137,228 21</u>

CASH BALANCE, JANUARY 31, 1899.

Cash balance, January 31, 1899, belonging to City of Boston, general City account, ...	\$4,477,759 56
Sinking Funds account	3,659,468 65
	<u>\$8,137,228 21</u>

APPENDIX.

The City Treasurer had in his possession, January 31, 1899, as treasurer and as custodian, the following trust funds, viz.:

BABCOCK MUSIC FUND.

By the will of ARCHIBALD BABCOCK, who died August 10, 1862, the sum of \$3,000 was bequeathed to the City of Charlestown, and accepted by the City Council of that city, November, 1862, upon the conditions and for the purposes expressed by him in his last will and testament:

"The income to be annually expended in procuring the services of musicians, or of a band or bands of musicians, to perform in public in the City of Charlestown, within its present limits, free to all its citizens, one-half of said income to be annually expended in procuring musicians, or band or bands of musicians, to play on or near the small common at the 'Neck,' so called, at the corner of Main and Cambridge streets, preference to be given to citizens of Charlestown, due regard being had as to ability and quality."

Deposits in the Charlestown Five-Cents Savings Bank . \$3,000 00

CITY HOSPITAL FUNDS.

BALL FUND. — Bequest of JONAS BALL, the interest of which is to furnish clothing to indigent patients when leaving the hospital.

Invested in one certificate of indebtedness of City of Boston,
due July 1, 1919, interest at four per cent. per annum . \$1,000 00

BURRELL ETHER PRIZE FUND. — Amount received from TOWNSEND WILLIAM THORNDIKE as follows: "I hereby give to the Trustees of the Boston City Hospital the sum of \$1,000, to found the 'Herbert L. Burrell Ether Prize Fund.' From the interest of this fund I desire that money prizes shall be given semi-annually to the surgical house officer, who administers ether or other anæsthetic in the most skilful and humane manner. Only surgical house officers of the Boston City Hospital shall be eligible to compete. The award is to be made by three judges, these to be appointed by the senior surgeon and the superintendent of the hospital. In case no house officer is considered worthy of the prize, the interest shall be added to the principal. Should the principal increase to such an amount as shall be considered sufficient to warrant the offering of a second prize of lesser amount, such second prize shall be established, and shall be known as the 'William H. Thorndike Ether Prize Fund.' The sixteenth day of October being the anniversary of the discovery of anæsthesia, that date shall be one of the days on which a prize shall be awarded."

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1917, interest at four per cent. per annum . \$1,000 00

CHEEVER FUND. — Donations by Dr. DAVID W. CHEEVER, one of two thousand dollars accepted by the Trustees March 20, 1889, the other of one thousand dollars received by City Treasurer May 1, 1897, the income of both to be expended as per following extract from his letter, and as per letter from Trustees of City Hospital April 24, 1897:

"To purchase and present to each house surgeon when his term of service expires a small case (pocket case) of surgical instruments as a gift from me." Invested in certificates of indebtedness of City of Boston with rates of interest as follows:

One due April 1, 1917, four per cent. per annum . . .	\$1,000 00
One due January 1, 1919, four per cent. per annum . . .	2,000 00
	<u>\$3,000 00</u>

GOODNOW FUND. — A bequest of ELISHA GOODNOW, of South Boston, who died in 1851. By his will the city came into possession of certain real estate on Cross street and Third street, for the purpose of establishing a hospital for the sick, one-half of said funds to be applied for the establishment and maintenance of free beds, which should always be at the disposal and under the control of the officers of the government of said hospital for the time being. The proceeds from the sale of these estates and accumulated interest were invested in certificates of indebtedness of City of Boston, with rates of interest as follows:

One due April 1, 1906, six per cent. per annum . . .	\$1,000 00
One due April 1, 1913, four per cent. per annum . . .	16,500 00
One due April 1, 1915, four per cent. per annum . . .	4,500 00
One due October 1, 1917, four per cent. per annum . . .	4,000 00
	<u>\$26,000 00</u>

GOODNOW LIBRARY FUND. — Donation of GEORGE GOODNOW, the interest of which is to be expended annually by the Board of Trustees in replenishing the library of the hospital with books and pamphlets suitable for the reading of the patients during convalescence.

Invested in one certificate of indebtedness of City of Boston,
due April 1, 1913, interest at four per cent. per annum . . . \$1,000 00

HEMMENWAY FUND. — Donation of Mrs. ELLEN L. HEMMENWAY, for the support of a free bed in the City Hospital in memory of her late husband, Charles P. Hemmenway.

Invested in one certificate of indebtedness of City of Boston,
due October 1, 1923, interest at four per cent. per annum, \$5,000 00

NICHOLS FUND. — Bequest of LAWRENCE NICHOLS, who died in September, 1862, of \$1,000, less internal-revenue tax, "towards the establishment and endowment of a City Hospital," and from the executor of the will as a residuary legatee, \$530.50. These amounts and accumulated interest were invested in

One certificate of indebtedness of City of Boston, due July 1, 1907, interest at six per cent. per annum . . .	\$1,000 00
One certificate of indebtedness of City of Boston, due April 1, 1913, interest at four per cent. per annum . . .	1,000 00
	<u>\$2,000 00</u>

NORCROSS FUND. — Donation of OTIS NORCROSS, formerly Mayor of the City, the interest of which is to furnish clothing to indigent patients when leaving the hospital.

Invested in one certificate of indebtedness of City of Boston,
due October 1, 1917, interest at four per cent. per annum, \$2,000 00

PERKINS FUND. — Bequest of MARY G. PERKINS, the income of which is to be expended for Medical Library and Artificial limbs and surgical appliances, for the use of patients leaving the hospital.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1919, interest at four per cent. per annum, \$7,500 00

SCREEN FUND. — Received by City Collector, November 8, 1898, from Superintendent of City Hospital as a gift to the City Hospital, to be drawn upon by the Trustees of the City Hospital for furnishing the hospital with wire screens. Check "E.C.C." received by City Treasurer from City Collector and deposited November 9, 1898.

Cash in City Treasury	<u>\$1,000 00</u>
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SHAW FUND.—Bequest of MARY LOUISA SHAW, the income of which is to be expended by the Trustees for the purchase of flowers and fruit for the use and comfort of the patients in the hospital.

Invested in one certificate of indebtedness of City of Boston,
due April 1, 1905, interest at six per cent. per annum . . . \$2,000 00

ANN WHITE VOSE BEQUEST.—February 19, 1897, received from George White and Francis C. Welch, trustees under the will of ANN WHITE VOSE through the Trustees of the City Hospital, one hundred thousand dollars for the purpose of erecting a building in connection with the City Hospital Buildings, to be known as the "Ann White Vose Building." Accepted by vote of Trustees, February 17, 1897.

Amount received as above \$100,000 00
Interest on deposit to January 1, 1899 3,285 57

\$103,285 57

Paid on Mayor's drafts for architectural and other expenses,
erecting building 66,413 14

Amount of Fund January 31, 1899, deposited in Colonial
National Bank \$36,872 43

WYMAN BUILDING FUND.—Amount received November 10, 1898, from A. F. Estabrook and C. H. Watson, executors of the estate of Thomas T. Wyman, late of Boston, deceased, through the Trustees of the Boston City Hospital, on account of bequest to the Boston City Hospital, under the will of said Thomas T. Wyman, deposited with the Treasurer of the City of Boston, to be taken by him as the Wyman Building Fund, and to be appropriated by the Trustees of the Boston City Hospital, under the terms of said will.

Amount received as above \$65,000 00
Interest on deposit to January 1, 1899 181 77

Amount of Fund January 31, 1899, deposited in Colonial
National Bank \$65,181 77

RECAPITULATION OF CITY HOSPITAL TRUST FUNDS.

Ball Fund	\$1,000 00
Burrell Ether Prize Fund	1,000 00
Cheever Fund	3,000 00
Goodnow Fund	26,000 00
Goodnow Library Fund	1,000 00
Hemmenway Fund	5,000 00
Nichols Fund	2,000 00
Norcross Fund	2,000 00
Perkins Fund	7,500 00
Screen Fund	1,000 00
Shaw Fund	2,000 00

\$51,500 00

Ann White Vose Bequest	36,872 43
Thomas T. Wyman Bequest	65,181 77

\$153,554 20

DORCHESTER NORTH BURIAL GROUND TRUST FUND.

Amount paid by the owners of lots in Dorchester North Burial Ground, the income of which is to be expended for the perpetual care of said lots.

Cash in City Treasury \$318 00

DORCHESTER SOUTH CEMETERY TRUST FUND.

Amount paid by the owners of lots in Dorchester South Cemetery, the income of which is to be expended for the perpetual care of said lots. Invested in certificates of indebtedness of the City of Boston, maturing and bearing interest as follows:

One due April 1, 1913, four per cent. per annum . . .	\$300 00
One due January 1, 1916, four per cent. per annum . . .	100 00
	<u>\$400 00</u>

EVERGREEN CEMETERY FUND.

Amount paid by the owners of lots in Evergreen Cemetery, the income of which is to be expended for the perpetual care of lots. Invested in certificates of indebtedness of the City of Boston, maturing and bearing interest as follows:

One due October 1, 1900, five per cent. per annum . . .	\$100 00
One due April 1, 1902, four per cent. per annum . . .	800 00
One due April 1, 1913, four per cent. per annum . . .	200 00
One due October 1, 1914, four per cent. per annum . . .	500 00
One due January 1, 1916, four per cent. per annum . . .	100 00
One due October 1, 1917, four per cent. per annum . . .	500 00
One due October 1, 1917, four per cent. per annum . . .	500 00
One due January 1, 1918, three and one-half per cent. per annum . . .	300 00
One due November 15, 1919, three and one-half per cent. per annum . . .	200 00
One due October 1, 1923, four per cent. per annum . . .	800 00
One due October 1, 1923, four per cent. per annum . . .	100 00
	<u>\$4,100 00</u>
Cash in City Treasury	384 00
	<u>\$4,484 00</u>

FOSS SEVENTEENTH OF JUNE AND FLAG FUNDS.

The City Council of the City of Charlestown, in August, 1866, accepted the bequests made in the will of JACOB FOSS, who died in Charlestown, June 2, 1866, the income of which is to be expended for the following purposes:

Celebrating the anniversary of the Battle of Bunker Hill, for either or all of the following purposes, viz.: "*Ringing the bells, firing salutes, music, or decorating the streets.*"

Invested in one certificate of indebtedness, City of Boston,
due October 1, 1917, interest at four per cent. per annum, \$2,000 00

Purchasing "United States flags for the use of the late City of Charlestown within its present limits; the flags so purchased to be used on all proper occasions, so that not more than two years' purchases shall be on hand at any time."

Invested in one certificate of indebtedness, City of Boston,
due October 1, 1917, interest at four per cent. per annum, \$2,000 00

JOHN FOSTER TRUST FUND.

Received October 14, 1898, from Charles U. Cotting and Herbert Nash, surviving executors of the will of JOHN FOSTER, deceased, late of Boston, thirty thousand (\$30,000) dollars. Said amount to be devoted to the object as set forth in the will of said Foster, viz.: I give and bequeath to the City of Boston thirty thousand (\$30,000) dollars, or so

much as may be necessary for the purpose of erecting a monumental statue of the late Reverend William Ellery Channing with a canopy over the same, to be placed in the Public Garden opposite the Arlington Street Church."

Amount received as above	\$30,000 00
Interest on deposit to January 1, 1899	128 34

Amount of Fund January 31, 1899, deposited in Mechanics National Bank	<u>\$30,128 34</u>
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FRANKLIN TRADES SCHOOL FUND.

The following is a copy of an order passed at a meeting of the Managers of the Franklin Fund, December 28, 1893:

Ordered, That the sum set apart from the general Franklin Fund as due to the City of Boston, on July 1, 1893, viz: \$322,490.20 with its accumulations, be paid by the Treasurer of the Fund in January next to the City Treasurer, to constitute a special fund for the purchase of land, and for the erection thereon of the Franklin Trades School, and the equipment of the same; said expenditures to be made under the direction of such department as may for the time being be charged by the Statutes and Ordinances with the duty of erecting and furnishing public buildings in the City of Boston. The location of and plans for said school to be approved by the Board of Managers of said fund.

Attest:

JOHN P. BRAWLEY, *Acting Clerk.*

Received January 17, 1894, according to above order, from S. F. McCleary, Treasurer of the Franklin Fund as follows:

City's portion of the fund to January 17, 1894	\$328,940 00
Interest to January 17, 1894	360 48

	<u>\$329,300 48</u>
Interest on deposit to January 1, 1899	34,244 21

\$363,544 69

Mayor's Special Draft for expense of Managers visiting trades schools in other cities	\$1,800 00
Less not expended, returned	514 42

\$1,285 58

Paid on Mayor's Drafts, miscellaneous ex- penses	661 95
	<u>1,947 53</u>

Amount of fund, January 31, 1899, deposited in Second National Bank	<u>\$361,597 16</u>
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GEORGE B. HYDE FUND.

Amount received from executor of estate of GEORGE B. HYDE, being a legacy from said GEORGE B. HYDE, for the purpose of erecting a statue of Rufus Choate, and providing a suitable pedestal and foundation for the same. The amount of legacy, fourteen thousand dollars, with the income thereof, by order of the City Council to be invested, and on order of the Mayor, to be applied to the purchase and erection of said statue.

Amount of funds, invested in City bonds, February 1, 1896	\$14,000 00
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July 1, 1896, sold one bond of \$1,000 at \$107	\$1,000 00
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December 1, 1897, sold two bonds of \$2,000 each at \$114.25	4,000 00
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<i>Carried forward</i>	\$5,000 00	<u>\$14,000 00</u>
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<i>Brought forward</i>	\$5,000 00	\$14,000 00
December 1, 1897, sold one bond of \$1,000 at \$114.25	1,000 00	
		6,000 00
Leaving invested		\$8,000 00
Add proceeds of bonds sold		6,784 72
		\$14,784 72
Interest received on investment		1,918 08
		\$16,702 80
Expended for erection of statue		7,000 00
Amount of fund, January 31, 1899		<u>\$9,702 80</u>

Invested in certificates of indebtedness of City of Boston, maturing and bearing interest as follows:

Two due, January 1, 1925, four per cent. per annum, \$2,000 each	\$4,000 00
Four due, January 1, 1925, four per cent. per annum, \$1,000 each	4,000 00
	\$8,000 00
Cash in City Treasury	1,702 80
	<u>\$9,702 80</u>

MOUNT HOPE CEMETERY FUND.

Amounts paid by owners of lots in Mount Hope Cemetery, the income from which is to be expended by the trustees for the perpetual care of lots. Invested in certificates of indebtedness of City of Boston, maturing and bearing interest as follows:

One due April 1, 1899, five per cent. per annum	\$2,000 00
One due October 1, 1900, five per cent. per annum	1,500 00
One due April 1, 1902, four per cent. per annum	2,500 00
One due October 1, 1902, four per cent. per annum	2,000 00
One due January 1, 1903, four per cent. per annum	500 00
One due October 1, 1903, four per cent. per annum	1,000 00
One due January 1, 1905, six per cent. per annum	1,000 00
One due April 1, 1906, six per cent. per annum	1,000 00
One due October 1, 1907, five per cent. per annum	1,000 00
One due October 1, 1911, four per cent. per annum	1,000 00
One due April 1, 1914, four per cent. per annum	1,000 00
One due October 1, 1914, four per cent. per annum	1,500 00
One due October 1, 1915, four per cent. per annum	3,000 00
One due January 1, 1916, four per cent. per annum	4,500 00
One due April 1, 1916, four per cent. per annum	1,000 00
One due July 1, 1916, four per cent. per annum	1,000 00
One due October 1, 1916, four per cent. per annum	3,000 00
One due April 1, 1917, four per cent. per annum	1,000 00
One due April 1, 1917, four per cent. per annum	2,000 00
One due October 1, 1917, four per cent. per annum	1,000 00
One due October 1, 1917, four per cent. per annum	2,000 00
One due January 1, 1918, three and one-half per cent. per annum	1,900 00
<i>Carried forward</i>	<u>\$36,400 00</u>

<i>Brought forward</i>		\$36,400 00
One due July 1, 1918, four per cent. per annum	1,500 00	
One due October 1, 1918, four per cent. per annum	1,000 00	
One due April 1, 1919, four per cent. per annum	1,000 00	
One due July 1, 1919, four per cent. per annum	1,000 00	
One due November 15, 1919, three and one-half per cent. per annum	1,400 00	
One due October 1, 1920, four per cent. per annum	3,000 00	
One due October 1, 1920, four per cent. per annum	1,000 00	
One due October 1, 1920, four per cent. per annum	2,000 00	
One due October 1, 1922, four per cent. per annum	1,000 00	
One due October 1, 1923, four per cent. per annum	2,000 00	
One due October 1, 1923, four per cent. per annum	1,700 00	
One due October 1, 1923, four per cent. per annum	2,900 00	
One due October 1, 1924, four per cent. per annum	1,225 00	
One due October 1, 1928, three and one-half per cent. per annum	6,000 00	
		\$63,125 00
Cash in City Treasury	110 82	
		\$63,235 82

PHILLIPS-STREET FUND.

This is a bequest of JONATHAN PHILLIPS, who died in July, 1860, who gave by his will to the City of Boston \$20,000 "as a trust fund, the income of which will be annually expended to adorn and embellish the streets and public places in said city," which has been invested in

One certificate of indebtedness of City of Boston, due January 1, 1906, interest at six per cent. per annum, payable to the Mayor of the city for the time being, for \$20,000 00

POLICE CHARITABLE FUND.

By orders of the City Council, approved July 7, 1890, the principal and income of the fund known as the Police Charitable Fund, consisting of moneys which had been earned by police officers for fees as witnesses, in Municipal and District Courts of the City of Boston, were placed in charge of the City Treasurer, as custodian, and the Board of Police were authorized to expend the income thereof, and the amount appropriated for pensions of police, for the payment of pensions of members of the police force who have been placed on the pension roll, and with the approval of the Mayor, for the relief of persons who have received an honorable discharge from the police force by reason of sickness, age, or other disability, and who are, in consequence thereof, in necessitous circumstances; and also for the relief of the widows and orphans, in necessitous circumstances, of police officers who have died while in the service of the city, or from the effects of injuries received in the execution of their duty.

Invested in certificates of indebtedness of City of Boston, maturing and bearing interest as follows:

One due April 1, 1899, five per cent. per annum	\$3,500 00
One due April 1, 1899, five per cent. per annum	1,000 00
One due October 1, 1900, five per cent. per annum	5,000 00
One due October 1, 1900, five per cent. per annum	2,400 00
One due October 1, 1900, four per cent. per annum	7,000 00
One due January 1, 1901, four per cent. per annum	3,000 00
One due October 1, 1901, four per cent. per annum	5,000 00
One due April 1, 1902, four per cent. per annum	7,000 00
One due April 1, 1902, four per cent. per annum	3,000 00
One due October 1, 1902, four per cent. per annum	6,000 00

Carried forward \$42,900 00

<i>Brought forward</i>		\$42,900 00
One due January 1, 1903, four per cent. per annum		5,000 00
One due October 1, 1903, four per cent. per annum		4,000 00
One due October 1, 1903, four per cent. per annum		3,000 00
One due April 1, 1905, six per cent. per annum		10,000 00
One due April 1, 1905, six per cent. per annum		6,000 00
One due April 1, 1906, six per cent. per annum		2,750 00
One due April 1, 1906, six per cent. per annum		2,000 00
One due October 1, 1906, six per cent. per annum		4,000 00
One due April 1, 1907, six per cent. per annum		4,000 00
One due April 1, 1908, five per cent. per annum		3,000 00
One due October 1, 1911, four per cent. per annum		5,000 00
One due July 1, 1912, four per cent. per annum		4,000 00
One due October 1, 1912, four per cent. per annum		5,000 00
One due April 1, 1914, four per cent. per annum		5,000 00
One due October 1, 1914, four per cent. per annum		6,000 00
One due April 1, 1915, four per cent. per annum		4,500 00
One due April 1, 1915, four per cent. per annum		1,500 00
One due October 1, 1915, four per cent. per annum		6,000 00
One due April 1, 1916, four per cent. per annum		5,000 00
One due October 1, 1916, four per cent. per annum		6,300 00
One due April 1, 1917, four per cent. per annum		5,000 00
One due October 1, 1917, four per cent. per annum		7,500 00
One due October 1, 1917, four per cent. per annum		7,000 00
One due January 1, 1918, four per cent. per annum		3,000 00
One due January 1, 1918, four per cent. per annum		2,000 00
One due April 1, 1918, four per cent. per annum		300 00
One due July 1, 1918, four per cent. per annum		3,500 00
One due October 1, 1918, four per cent. per annum		3,500 00
One due January 1, 1919, four per cent. per annum		3,000 00
One due April 1, 1919, four per cent. per annum		3,000 00
One due July 1, 1919, four per cent. per annum		1,200 00
One due November 15, 1919, three and one-half per cent. per annum		12,000 00
One due January 1, 1920, four per cent. per annum		3,000 00
One due January 6, 1920, three and one-half per cent. per annum		2,000 00
One due July 1, 1920, four per cent. per annum		4,600 00
One due October 1, 1920, four per cent. per annum		1,000 00
One due October 1, 1920, four per cent. per annum		1,500 00
One due October 1, 1921, four per cent. per annum		3,500 00
One due October 1, 1921, four per cent. per annum		1,000 00
One due October 1, 1923, four per cent. per annum		4,000 00
One due October 1, 1923, four per cent. per annum		1,000 00
		<u>\$207,550 00</u>

POOR WIDOWS' FUND.

This is a donation made by Mrs. JOANNA BROOKER and others, to the Selectmen of Boston for the time being.

The income from this fund is paid over in equal proportions to the Aldermen of this city, and they distribute the same, at their discretion, for the relief of POOR WIDOWS AND SICK PEOPLE. Invested in certificates of indebtedness of the City of Boston, maturing and bearing interest as follows:

One due April 1, 1905, interest at six per cent. per annum .	\$1,700 00
One due October 1, 1917, interest at four per cent. per annum	1,500 00
	\$3,200 00

PUBLIC LIBRARY FUNDS.

ARTZ FUND. — Donation from VICTORINE THOMAS ARTZ of Chicago, of \$10,000, "the income of this sum to be employed in the purchase of valuable rare editions of the writings, either in verse or prose, of American and of foreign authors." These books are to be known as the "Longfellow Memorial Collection."

Invested in one certificate of indebtedness of City of Boston, due January 1, 1917, interest at the rate of four per cent. per annum \$10,000 00

BATES FUND. — This is a donation made by JOSHUA BATES of London, in March, 1853.

Invested in one certificate of indebtedness of City of Boston, due April 1, 1913, interest at four per cent. per annum, \$50,000 00

"The income only of this fund is to be used, each and every year, expended in the purchase of such books of permanent value and authority as may be found most needful and most useful."

BIGELOW FUND. — This is a donation made by JOHN P. BIGELOW, in August, 1850, when Mayor of the City.

The income from this fund is to be appropriated to the purchase of books for the increase of the library.

Invested in one certificate of indebtedness of City of Boston, due April 1, 1913, interest at four per cent. per annum \$1,000 00

BOWDITCH FUND. — This is the bequest of J. INGERSOLL BOWDITCH of Boston, of \$10,000, to the Boston Public Library, the income of which is to be expended for the purchase of books of permanent value and authority in Mathematics and Astronomy.

Invested in one certificate of indebtedness of City of Boston, due January 1, 1920, interest at three and one-half per cent. per annum \$10,000 00

BRADLEE FUND. — Bequest of the late Rev. CALEB DAVIS BRADLEE, for the Boston Public Library.

Invested in one certificate of indebtedness of City of Boston, due January 1, 1918, interest at three and one-half per cent. per annum \$1,000 00

HENRY SARGENT CODMAN MEMORIAL FUND. — Donation from friends of the late HENRY SARGENT CODMAN of Brookline, to be utilized in purchase of books upon landscape gardening, said donation to be known as the Henry Sargent Codman Memorial Fund.

Cash in City Treasury \$2,852 41

FRANKLIN CLUB FUND. — This is a donation made in June, 1863, by a literary association of young men in Boston, who, at the dissolution of the association, authorized its trustees, Thomas Minns, John J. French and J. Franklin Reed, to dispose of the funds on hand in such a manner as to them should seem judicious. They elected to bestow it on the Public Library, attaching to it the following conditions: "In trust that the income, but the income only, shall, year by year, be expended in the purchase of books of permanent value for the use of the free Public Library of the city, and as far as practicable, of such a character

as to be of special interest to young men." The Trustees expressed a preference for books relative to Government and Political Economy.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1914, interest at four per cent. per annum, \$1,000 00

GREEN FUND.—Donations of Dr. SAMUEL A. GREEN, formerly Mayor of the city, of \$2,000, the income of which is to be expended for the purchase of books relating to American history. Invested in certificates of indebtedness of City of Boston, maturing and bearing interest as follows:

One due October 1, 1900, five per cent. per annum	.	.	\$500 00
One due April 1, 1908, five per cent. per annum	.	.	1,000 00
One due April 1, 1914, four per cent. per annum	.	.	500 00
			<u>\$2,000 00</u>

CHARLOTTE HARRIS FUND.—Bequest of CHARLOTTE HARRIS of Boston, the object of which is stated in the following extract from her will: "I give to the Charlestown Public Library \$10,000 to be invested on interest, which interest is to be applied to the purchase of Books published before 1850. I also give to said Public Library my own private library, and the portrait of my grandfather, Richard Devens." Bequests accepted by City Council, July 31, 1877.

Invested in one certificate of indebtedness of City of Boston,
due October 1, 1917, interest at four per cent. per annum, \$10,000 00

THOMAS B. HARRIS FUND.—Bequest of THOMAS B. HARRIS of Charlestown, for the benefit of the Charlestown Public Library.

Invested in one certificate of indebtedness of City of Boston,
due April 1, 1914, interest at four per cent. per annum . \$1,000 00

ABBOTT LAWRENCE FUND.—This is the bequest of ABBOTT LAWRENCE of Boston.

Invested in one certificate of indebtedness of City of Boston,
due July 1, 1905, interest at six per cent. per annum . \$10,000 00

The interest on this fund is to be exclusively appropriated for the purchase of books for the said library, having a permanent value.

EDWARD LAWRENCE FUND.—This is the bequest of EDWARD LAWRENCE of Charlestown. The following clause from his will explains its purpose:

"To hold and apply the income, and so much of the principal as they may choose, to the purchase of special books of reference to be kept and used only at the Charlestown Branch of said Public Library."

Invested in one certificate of indebtedness of City of Boston,
due April 1, 1916, interest at four per cent. per annum . \$500 00

CHARLES G. LORING MEMORIAL FUND.—Donation from family of CHARLES GREELY LORING, deceased, the income of which to be expended for the purchase of books for the West End Branch.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1916, interest at four per cent. per annum, \$500 00

CHARLES G. MEAD FUND.—Bequest of CHARLES G. MEAD, the same to constitute a trust fund to be designated the "Charles G. Mead Trust Fund," for the promotion of the objects of the Public Library, in such manner as the government of said library shall deem best, and

so far as said government shall deem it consistent with the objects of the library, to be used for the benefit of the South Boston Branch Library.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1917, interest at the rate of four per cent.
per annum \$2,500 00

O'REILLY MEMORIAL FUND. — Donation from the Papyrus Club, in memory of JOHN BOYLE O'REILLY, late a member of the club, the income to be devoted to the purchase of books for the Boston Public Library.

Invested in one certificate of indebtedness of City of Boston,
due July 1, 1917, interest at four per cent. per annum . . . \$1,000 00

PHILLIPS FUND. — This is a donation made by JONATHAN PHILLIPS of Boston, in April, 1853.

Invested in one certificate of indebtedness of City of Boston,
due April 1, 1913, interest at four per cent. per annum . . . \$10,000 00

The interest on this fund is to be used exclusively for the purchase of books for said library.

Also a bequest by the same gentleman in his will, dated 28th of September, 1849.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1906, interest at six per cent. per annum, \$20,000 00

The interest on which is to be annually devoted to the maintenance of a Free Public Library.

Mr. Phillips died on the 29th of July, 1860, at the age of 82; the latter sum was realized by the city in April, 1861.

PIERCE FUND. — This is a donation made by HENRY L. PIERCE, formerly Mayor of the city, November 29, 1873, and accepted by the City Council December 27, 1873.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1924, interest at four per cent. per annum \$5,000 00

SCHOLFIELD FUND. — Bequest of ARTHUR SCHOLFIELD of \$50,000, who died in New York, January 17, 1883, who provided that upon the death of certain heirs the interest was to be used for the purchase of books of permanent value. His last heir, Joseph Scholfield, died November 18, 1889, and by his will bequeathed to the City of Boston the sum of \$11,766.67, which represents the income of said fund received by him up to the time of his death, to be added to the fund bequeathed by his brother and which, with the interest accumulated thereon, was invested in a certificate of indebtedness of the City of Boston for \$11,800.

The fund is now invested in certificates of indebtedness of the City of Boston, bearing interest and maturing as follows:

One due October 1, 1913, four per cent. per annum . . .	\$50,000 00
One due July 1, 1920, four per cent. per annum . . .	11,800 00
	<u>\$61,800 00</u>

SOUTH BOSTON BRANCH LIBRARY FUND. — Donation of a citizen of South Boston, the income of which is to be expended for the benefit of the South Boston Branch Library.

Invested in one certificate of indebtedness of City of Boston,
due July 1, 1919, interest at four per cent. per annum . . . \$100 00

TICKNOR FUND.—By the will of GEORGE TICKNOR of Boston, he bequeathed to the City of Boston all his books and manuscripts in the Spanish and Portuguese languages, about four thousand volumes, and also the sum of four thousand dollars. The city is required to spend not less than one thousand dollars in every five years during the twenty-five years next succeeding (*i.e.*, the income of four thousand dollars, at the rate of five per cent. per annum), in the purchase of books in the Spanish and Portuguese languages and literature. At the end of twenty-five years the income of said sum is to be expended annually in the purchase of books of permanent value, either in the Spanish or Portuguese languages, or in such other languages as may be deemed expedient by those having charge of the library. The books bequeathed or purchased are always to be freely accessible for reference or study, but are not to be loaned for use outside of the library building.

Invested in one certificate of indebtedness of City of Boston,
due October 1, 1920, interest at four per cent. per annum, \$4,000 00

TODD FUND.—Donation of WILLIAM C. TODD of Atkinson, New Hampshire, to be held in trust, the income only thereof to be expended for the purchase of such current newspapers of this and other countries as the board or officers for the time being having charge of the Public Library of the City of Boston, shall deem proper.

Invested in one certificate of indebtedness of City of Boston,
due October 1, 1927, interest at four per cent. per annum, \$50,000 00

TOWNSEND FUND.—This is a donation from William Minot and William Minot, Jr., executors of the will of MARY P. TOWNSEND, of Boston, at whose disposal she left a certain portion of her estate in trust, for such charitable and public institutions as they might think meritorious. Said executors accordingly selected the Public Library of the City of Boston as one of such institutions, and attached the following conditions to the legacy: "The income only shall, in each and every year, be expended in the purchase of books for the use of the library; each of which books shall have been published in some one edition at least five years at the time it may be so purchased."

Invested in one certificate of indebtedness of City of Boston,
due April 1, 1899, interest at five per cent. per annum . \$4,000 00

TREADWELL FUND.—By the will of DANIEL TREADWELL, of Cambridge, late Rumford Professor in Harvard College, who died February 27, 1872, he left the residue of his estate, after payment of debts, legacies, etc., in trust to his executors, to hold during the life of his wife for her benefit, and after her decease to divide the residue then remaining in the hands of the trustees as therein provided, and convey one-fifth part thereof to the Trustees of the Public Library in the City of Boston. The income of which is to be expended by said trustees in such manner as they may deem for the best interest of the Library.

Invested in certificates of indebtedness of City of Boston, bearing interest and maturing as follows:

One due January	1, 1916, four per cent. per annum . .	\$500 00
One due April	1, 1916, four per cent. per annum . .	2,000 00
One due October	1, 1917, four per cent. per annum . .	1,700 00
One due November	15, 1919, three and one-half per cent. per annum . .	1,400 00
One due October	1, 1921, four per cent. per annum . .	1,000 00
One due October	1, 1923, four per cent. per annum . .	350 00

Carried forward \$6,950 00

<i>Brought forward</i>	\$6,950 00
Also —	
16 shares Boston & Albany Railroad Corporation	2,785 00
6 shares Boston & Providence Railroad Corporation	1,077 00
12 shares Fitchburg Railroad Corporation preferred stock	1,062 00
1 share Vermont & Massachusetts Railroad Corporation	133 00
	\$12,007 00
Cash in City Treasury	37 69
	\$12,044 69

TWENTIETH REGIMENT MEMORIAL FUND. — Donation of the Twentieth Regiment Association, to establish a Public Library Trust Fund to be known as the "Twentieth Regiment Memorial Fund," the income of which to be used for the purchase of books of a military and patriotic character to be placed in alcove appropriated as a memorial of the Twentieth Regiment.

Invested in one certificate of indebtedness of City of Boston,
due October 1, 1917, interest at four per cent. per annum, \$5,000 00

RECAPITULATION PUBLIC LIBRARY TRUST FUNDS.

Artz Fund	\$10,000 00
Bates Fund	50,000 00
Bigelow Fund	1,000 00
Bowditch Fund	10,000 00
Bradlee Fund	1,000 00
Henry Sargent Codman Memorial Fund	2,852 41
Franklin Club Fund	1,000 00
Green Fund	2,000 00
Charlotte Harris Fund	10,000 00
Thomas B. Harris Fund	1,000 00
Abbott Lawrence Fund	10,000 00
Edward Lawrence Fund	500 00
Charles G. Loring Memorial Fund	500 00
Charles G. Mead Fund	2,500 00
O'Reilly Memorial Fund	1,000 00
Phillips Funds	30,000 00
Pierce Fund	5,000 00
Scholfield Fund	61,800 00
South Boston Branch Library Trust Fund	100 00
Ticknor Fund	4,000 00
Todd Fund	50,000 00
Townsend Fund	4,000 00
Treadwell Fund	12,044 69
Twentieth Regiment Memorial Fund	5,000 00
	\$275,297 10

GEORGE L. RANDIDGE FUND.

This is a bequest of the late GEORGE L. RANDIDGE and received from George S. Hale and Alfred D. Foster, trustees of his estate, June 26, 1896, the income thereof to be devoted for the sole purpose of affording to the children of the poor of the city of all religious denominations the pleasure of one or more excursions during the months of July and August in each year. Income to be paid as designated by the Mayor.

Invested in one certificate of indebtedness of City of Boston,
due July 1, 1916, interest at four per cent. per annum . \$50,000 00

SAWYER, MARCELLA-STREET HOME FUND.

Bequest of SAMUEL E. SAWYER for the benefit of the "Marcella-Street Home for Poor and Neglected Children," on the condition that the sum be safely invested as a permanent fund, and the income only of said sum be used in such manner as will best promote the interests and prosperity of the institution. Received as follows: \$2,000, December 31, 1895; \$213.94, April 21, 1896, and \$98.40, April 26, 1897. Accepted by City Council by order approved November 30, 1895. Invested in certificates of indebtedness of City of Boston, bearing interest and maturing as follows:

One due January 1, 1916, interest at four per cent. per annum	\$2,000 00
One due January 1, 1918, interest at three and one-half per cent. per annum	300 00
	\$2,300 00
Cash in City Treasury	12 34
	<u>\$2,312 34</u>

SCHOOL FUNDS.

BOWDOIN DORCHESTER FUND. — Proceeds from the sale of a woodland estate in Milton, conveyed by Gov. JAMES BOWDOIN to the inhabitants of the Town of Dorchester, invested in

One certificate of indebtedness of City of Boston, due January 1, 1920, interest at four per cent. per annum . . .	<u>\$4,500 00</u>
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Income to be expended by the School Committee for the benefit of the Public Schools in that part of Boston called Dorchester.

COMINS SCHOOL LIBRARY FUND. — Donation of LINUS B. COMINS, the interest of which is to be expended upon the library of the "Comins Grammar School for Girls," and to be held in trust by the Chairman of the School Committee, the Mayor of the city, and the President of the Common Council, who are constituted, *ex officio*, Trustees of the fund.

Invested in one certificate of indebtedness of City of Boston, due April 1, 1899, interest at five per cent. per annum . .	<u>\$500 00</u>
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EASTBURN FUND. — This is a bequest from JOHN H. EASTBURN and received from the executors of his estate in April, 1886.

The following clause from his will explains the purpose of the bequest:

"The interest to be applied to aid and assist deserving and poor scholars to finish their education, by pecuniary assistance, in the Normal School for Females."

Invested in one certificate of indebtedness of City of Boston, due April 1, 1916, interest at four per cent. per annum . .	<u>\$10,000 00</u>
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FRANKLIN MEDAL FUND. — This is a legacy by Dr. BENJAMIN FRANKLIN in 1791, the interest on which, since 1792, has been invested in silver medals, which are now distributed at the annual examinations, among the most deserving boys in the ENGLISH HIGH AND LATIN SCHOOLS.

Invested in one certificate of indebtedness of City of Boston, due April 1, 1900, interest at five per cent. per annum . .	<u>\$1,000 00</u>
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Income unexpended, cash in the Globe National Bank . .	<u>\$213 62</u>
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GIBSON FUND. — This is the bequest of CHRISTOPHER GIBSON, who provided by will, about 1674, that after the payment of legacies and debts, his executor should “purchase some estate for the promotion of learning in the town of Dorchester.” The surviving executor, Daniel Preston, purchased for £104 twenty-six acres of land at Smelt Brook, and deeded the same, February 6, 1693, to Enoch Wiswell, Samuel Robinson, John Tolman, James Bird, and Increase Sumner, as trustees, and to their successors and assigns, for the “use and purpose, benefit and behoof, of the schools of learning in the town of Dorchester.” Sales have been made from time to time, and a part still remains unsold. The proceeds have been invested in certificates of indebtedness of City of Boston, bearing interest and maturing as follows:

One due January 1, 1901, four per cent. per annum . . .	\$3,000 00
One due January 1, 1901, four per cent. per annum . . .	2,000 00
One due January 1, 1903, four per cent. per annum . . .	1,000 00
One due October 1, 1905, six per cent. per annum . . .	1,000 00
One due April 1, 1908, five per cent. per annum . . .	5,000 00
One due April 1, 1908, five per cent. per annum . . .	1,000 00
One due April 1, 1915, four per cent. per annum . . .	2,500 00
One due July 1, 1917, three and one-half per cent. per annum . . .	37,500 00
One due October 1, 1920, four per cent. per annum . . .	2,000 00
One due October 1, 1920, four per cent. per annum . . .	1,000 00
One due October 1, 1923, four per cent. per annum . . .	425 00
Cash in City Treasury	79
	<u>\$56,425 79</u>

LATIN SCHOOL PRIZE FUND. — This is a donation from a number of gentlemen in Boston, in the year 1819, the interest of which is invested in prizes, which are annually distributed among the most deserving scholars in the PUBLIC LATIN SCHOOL.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1906, interest at six per cent. per annum . \$1,050 00

LAWRENCE HIGH SCHOOL FUND. — This is a donation made by ABBOTT LAWRENCE of Boston, in the year 1844, the interest of which is payable annually to the Sub-Committee on the ENGLISH HIGH SCHOOL, for the time being; and is by them distributed in prizes for the best performance in various branches of literature and science in that institution; and in such other rewards to the scholars in the school as that committee shall recommend.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1906, interest at six per cent. per annum . \$2,000 00

LAWRENCE LATIN SCHOOL FUND. — This is a donation made by ABBOTT LAWRENCE, in the year 1845, the interest of which is payable annually to the “Chairman of the Sub-Committee of PUBLIC LATIN SCHOOL, for the time being,” and is distributed in prizes for the general encouragement of the scholars in such a way as the sub-committee on that school shall consider advisable.

Invested in one certificate of indebtedness of City of Boston,
due January 1, 1906, interest at six per cent. per annum . \$2,000 00

MILMORE BRIMMER SCHOOL FUND. — Bequest of MARTIN MILMORE, the income from which to aid in clothing the poor children of the Brimmer School.

Invested in one certificate of indebtedness of City of Boston, due April 1, 1914, interest at four per cent. per annum . .	<u>\$500 00</u>
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NORCROSS SCHOOL LIBRARY FUND. — Donation and bequest of OTIS NORCROSS, formerly Mayor of Boston. The income from this fund is to be paid to the master of the "Norcross School," to be expended in books for a library of the first class of said school. Invested in certificates of indebtedness of City of Boston, maturing and bearing interest as follows:

One due October 1, 1902, four per cent. per annum . . .	\$500 00
One due October 1, 1917, four per cent. per annum . . .	500 00
	<u>\$1,000 00</u>

SAWYER, HORACE MANN SCHOOL FUND. — Bequest of SAMUEL E. SAWYER for the benefit of the "Horace Mann School for Deaf and Dumb," on condition that the sum be safely invested as a permanent fund, and the income only of said sum be used in such manner as will best promote the interests and prosperity of the institution. Accepted by City Council by order approved November 30, 1895. Received \$2,000 December 31, 1895; \$213.94 April 21, 1896, and \$98.40 April 26, 1897. Invested in certificates of indebtedness of City of Boston, bearing interest and maturing as follows:

One due January 1, 1916, interest at four per cent. per annum	\$2,000 00
One due January 1, 1918, interest at three and one-half per cent. per annum	300 00
	<u>\$2,300 00</u>
Cash in City Treasury	12 34
	<u>\$2,312 34</u>

Cash in City Treasury, income unexpended	<u>\$85 25</u>
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SMITH FUND. — This was a legacy of ABIEL SMITH of Boston, who died in 1817, to the SELECTMEN OF THE TOWN OF BOSTON for the time being.

The income from this fund is appropriated towards the expense of "the Free Instruction of COLORED CHILDREN in Reading, Writing and Arithmetic." Invested in certificates of indebtedness of City of Boston, bearing interest and maturing as follows:

One due April 1, 1900, five per cent. per annum	\$4,000 00
One due April 1, 1915, four per cent. per annum	4,400 00
One due July 1, 1919, four per cent. per annum	200 00
	<u>\$8,600 00</u>

STOUGHTON FUND. — This is a bequest of Gov. WILLIAM STOUGHTON, who died at Dorchester, July 7, 1701, and gave to the schools of Dorchester one hundred and fifty pounds, "for the advancement of a salary of a school-master."

The terms of this bequest were complied with by the authorities of the Town of Dorchester. This fund was received from the Treasurer of the Town of Dorchester by the terms of the act of annexation of said town to Boston, and stands as follows:

Invested in one certificate of indebtedness of City of Boston, due April 1, 1915, interest at four per cent. per annum	<u>\$5,300 00</u>
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The income of the fund is paid to the City Treasurer, and credited annually to salaries of school instructors.

WEBB FRANKLIN SCHOOL FUND.—This is a legacy made in the year 1828, by RUFUS WEBB, formerly writing master in one of the public schools.

The income from this fund is applied to the purchase of books, etc., for the use of indigent scholars in the writing department of the Franklin School.

Invested in one certificate of indebtedness of City of Boston, due April 1, 1905, interest at six per cent. per annum, \$1,000 00

RECAPITULATION OF SCHOOL TRUST FUNDS.

Bowdoin Dorchester Fund	\$4,500 00
Comins School Library Fund	500 00
Eastburn Fund	10,000 00
Franklin Medal Fund	1,000 00
Gibson Fund	56,425 79
Latin School Prize Fund	1,050 00
Lawrence High School Fund	2,000 00
Lawrence Latin School Fund	2,000 00
Milmore Brimmer School Fund	500 00
Norcross School Library Fund	1,000 00
Sawyer, Horace Mann School Fund	2,312 34
Smith Fund	8,600 00
Stoughton Fund	5,300 00
Webb Franklin School Fund	1,000 00
	<u>\$96,188 13</u>

RECAPITULATION OF TRUST FUNDS IN CUSTODY OF CITY TREASURER.

Babcock Music	\$3,000 00
City Hospital	153,554 20
Dorchester North Burial Ground	318 00
Dorchester South Cemetery	400 00
Evergreen Cemetery	4,484 00
Foss Seventeenth of June and Flag	4,000 00
John Foster	30,128 34
Franklin Trades School	361,597 16
George B. Hyde	9,702 80
Mount Hope Cemetery	63,235 82
Phillips Street	20,000 00
Police Charitable	207,550 00
Poor Widows'	3,200 00
Public Library	275,297 10
George L. Randidge	50,000 00
Sawyer, Marcella-Street Home School	2,312 34
	96,188 13
	<u>\$1,284,967 89</u>



ANNUAL REPORT
OF THE
WATER DEPARTMENT

FOR THE YEAR ENDING JANUARY 31, 1899.

OFFICE OF THE WATER COMMISSIONER,
CITY HALL, BOSTON, February 1, 1899.

HON. JOSIAH QUINCY, *Mayor* :

SIR, — I submit a report of the doings of the Water Department for the year ending January 31, 1899.

The net income of the department shows a decrease as compared with last year. This is due to the taking of a portion of our system by the State.

The work of the department has been of a more varied nature than in previous years. In addition to the usual detail work thirty-three and six-tenths (33.6) miles of main pipe were laid, eight (8) miles of which were relaid.

The extension of our distribution service has so improved the supply in the Dorchester district that the Wayne-street pumping station at Elm Hill has been abandoned.

The laying of pipes in Columbia road has progressed favorably, and the new line of pipe for supplying the islands in the harbor has been almost laid to the sea-wall on Moon Island opposite Long Island.

The water service in West Roxbury and other portions of the city has been materially improved by the extension of mains in those localities. The system of salt-water mains (as an auxiliary fire service) has been extended so as to

enable the fire-boats to make connections with the system, and its success thoroughly demonstrated by tests.

The relaying work costs higher year by year, owing to the more crowded condition of the streets.

The apparatus for taking frost out of the ground that was used in the department last winter has been much improved. We are now able to lay main pipe in the winter as well as in the summer.

We have changed our method of excavating main pipe trenches. It was the practice to dig the whole length of the main pipe trench as wide as it must necessarily be at the bell-holes. Under the new system the portions of the trench between the holes are made just wide enough to enable the pipes to be laid. The trench also narrows as it tends toward the bottom. A saving is expected from this change, not only in the first cost of the work, but in the maintenance of streets after the pipe is laid.

A system of numbering hydrants throughout the city has been adopted, so that hereafter they will be known by their numbers, and the record of each is kept, showing the cost of maintenance, when and by whom inspected, etc. In addition, in order to show what gates are division gates, and what gates control main, service, fire, motor and elevator pipes, all gates are to be marked and numbered. It will be possible by this plan of numbering to keep a proper supervision of the hydrants and gates, and to locate them quickly.

There were established during last summer ten cold water fountains, so that water could be furnished to the public in summer weather at a temperature pleasant for drinking purposes. This was accomplished by chilling the water by running it through small reservoirs and pipes surrounded with chopped ice, the ice and the pipes being enclosed in a box insulated on the outside by a patent material. The cost of supplying these fountains with ice was nominal, as they consumed less than 500 lbs. each per day. On warm days the average number of people supplied per hour was over 600 for each fountain in the congested parts of the city. These fountains were found to be very acceptable to the public, and their patronage was so great as to create a demand for the extension of the system. It is the intention of the department to increase the number of cold-water fountains in the coming summer. In order that this may be done at a minimum of cost, we have cut more than sufficient ice from our reservoirs in Brookline and East Boston to supply our fountains for the coming season. The ice is stored in houses constructed on the grounds. We estimate that it will be possible to supply at least forty cold-



CUTTING ICE ON EAST BOSTON RESERVOIR.

water fountains. Through the courtesy of the Eastern Cold Storage Company, Walter L. Hill, president, plans for a cold water fountain connected with their pipe line have been prepared, and the fountain will be located in Faneuil Hall square, and in use during the coming summer. If it works successfully — and I have no doubt it will — it is proposed to still further utilize the cold-storage system in connection with our cold-water fountains. The drinking fountain which has been adopted and will be in use hereafter is artistic in its construction, and has received the approval of the Art Commission.

Owing to the establishment of the Metropolitan Water System the department will not hereafter maintain the pumping stations at West Roxbury and East Boston.

The Deacon service has been transferred from the Distribution to the Income Division. The methods in practice in the Meter Division, to which allusion was made in last years' report, have been changed, and the accounts there, as well as in the rest of the department, are now being kept correctly. The improvement in keeping records and accounts can be best realized from the fact that previous to February 1, 1896, the reports which formed the basis of the records and the accounts of the department were mostly unsigned, and were not made upon the ground where the work was done, but were transmitted by word of mouth to a foreman stationed in the yard at Albany street. Their accuracy depended wholly upon the memory of those who made them, and their knowledge of what was required for the basis of a proper record.

We now have a system of individual and original reports. These reports are signed by some employee of the department who has personal supervision of the work. Since the inauguration of this system the utter inadequacy of the old system has been forcibly demonstrated, and it is easy to understand why, previous to February 1, 1896, the records were not correctly kept. I submit the reports of Andrew Stewart, Examiner of Accounts, showing the changes and improvements that have been made in the records and accounts of the department, and the present condition of the same. (*See Appendix A.*)

The department has paid constant attention to electrolysis, and in the Engineer's report will be found the facts in detail.

Under the head of the pressing needs of the department, I would again respectfully call your attention to the crowded condition of the yard of the Distribution Division at 710

Albany street, where there is a lack of sufficient area to perform the work in an economical manner. All castings, pipe, lumber, etc., used by the department are received in this yard and thence distributed wherever the work may require. A year ago a part of this yard was transferred to the City Hospital. This transfer has increased the expense of handling our pipe and stock of all kinds. I am of the opinion that our present wharf facilities should be increased at least one-half.

It is essential to completely modernize the machinery of our present machine shop. By the adoption of new and improved machinery the work can be done at a great deal less cost than at the present time.

The style of post hydrants in use in the department should be replaced by more modern hydrants. Now when an engine attaches to a post hydrant it is necessary to shut down the hydrant, in order that another engine can attach to the same hydrant. A few of our hydrants, however, are arranged with independent shut-offs to each outlet, which does away with the necessity of shutting down the hydrant as each engine attaches to it. The general adoption of this latter system of hydrants is the one which I recommend. This can be done gradually at a cost of about \$8,000 to \$10,000 a year.

To meet the needs enumerated above, I would recommend the making of a special appropriation.

On February 1, 1896, I qualified as Water Commissioner. On the department roll dated January 30, 1896, there were 868 men eligible for employment, and of these about 600 were at work. Commencing with the latter part of December, 1895, the balance had been suspended from time to time, in accordance with the yearly practice of the department. These suspensions did not reach all grades of labor; they affected only those who were least able to bear it and whose services the department is least able to dispense with, viz.: the laborers on trench work and main pipe laying.

For the last three years all the men of the department have been employed in winter as well as in summer, and not laid off on two-thirds, one-half or one-quarter time, as was the practice previous to your administration. On January 26, 1899, the last pay-day of the fiscal year 1898-99, there were on the pay roll 885 men, or every man who was able to work. In order that the full force might be employed continuously, more day work has been done by our own employees in each of the three years of your administration than in 1895. It would be natural to expect that under these



SUPPLYING COLD WATER FOUNTAIN WITH ICE.

conditions the yearly expenses of the department would be increased, but such is not the fact. The amount of money expended during each of the fiscal years 1896, 1897 and 1898 is less than that expended in 1895, and the character and the amount of work done during any one of the years 1896, 1897 and 1898 will compare more than favorably with that done during 1895. The appended statements of money expended and work done during the years in question will substantiate this statement.

EXPENDITURES OF THE BOSTON WATER DEPARTMENT.

1895-96 to 1898-99, inclusive.

1895-96.

Current expenses (Auditor's Report, pp. 137, 138) . . .	\$610,101 70
Extension of Mains, etc. (Auditor's Report, p. 141) . . .	251,984 94
Additional Supply (Auditor's Report, p. 140) . . .	382,819 01
Paid on account of work done for corporations, etc. . .	\$1,244,905 65
	18,648 71
Total	<u>\$1,226,256 94</u>

1896-97.

Current expenses (Auditor's Report, p. 151) . . .	\$591,550 42
Extension of Mains, etc. (Auditor's Report, p. 153) . . .	232,142 98
Additional Supply, (Auditor's Report, p. 153) . . .	217,070 45
Paid on account of work done for corporations, etc. (Second Annual Report Water Commissioner, pp. 11-13)	\$1,040,763 85
	17,366 14
Total	<u>\$1,023,397 71</u>

1897-98.

Current expenses (Auditor's Report, p. 164) . . .	\$623,476 51
Extension of Mains, etc. (Auditor's Report, p. 165) . . .	281,782 32
Additional Supply, (Auditor's Report, p. 165) . . .	179,879 01
Paid on account of work done for corporations, etc. (Third Annual Report Water Commissioner, pp. 13, 14),	\$1,085,137 84
	13,300 73
Total	<u>\$1,071,837 11</u>

1898-99.

Current expenses and Extension of Mains — one appropriation — (Auditor's Exhibit, January 31, 1899, p. 19) . . .	\$808,582 59
From loan of \$200,000, issued November, 1898, for extension of mains (Auditor's Exhibit, January 31, 1899, p. 17)	152,601 63
Paid on account of work done for corporations, etc. . .	\$961,184 22
	47,798 94
Total	<u>\$913,385 28</u>

The amounts expended during the above years upon portions of the Water Department system now held by the State, estimated as closely as possible, are as follows :

1895-96	.	.	.	.	.	\$233,482 98
1896-97	.	.	.	.	.	200,608 84
1897-98	.	.	.	.	.	168,862 83
1898-99	.	.	.	.	.	14,557 91

The amount for the year 1898-99 (\$14,557.91) subtracted from the total amount as stated (\$913,385.28) would leave \$898,827.37 as the net expenditure for that year.

The total amount for the year 1897-98, that is, including the amounts paid on account of portions taken by the State, was \$1,071,837.11, showing a difference of expenditure between the two years of \$173,009.74, caused by the loss to the city of those portions of the department taken by the State.

MILES OF PIPE LAID BY DAY LABOR.

1895-96 to 1898-99, inclusive.

	1895-96.	1896-97.	1897-98.	1898-99.
By employees.....	23.1	33.4	28.04	32.0
By other than employees...	4.9	3.0	0.16	1.6
Total	28.0	36.4	28.2	33.6

The work of pipe laying in the heart of the city is difficult and very costly. Of the total mileage of pipe laid during each of the last four years the amount of main pipe laid in the downtown streets was far less in the year 1895-6 than in either of the three subsequent years, as the following comparative statement shows :

1895-96.	1896-97.	1897-98.	1898-99.
5,722 feet.	19,197 feet.	20,763 feet.	14,721 feet.

Relaying pipe, no matter in what part of the city, is always difficult work, and expensive compared with ordinary pipe laying, as the house connections, hydrants, etc., have to be transferred from the old to the new mains. When the relaying is in the City Proper, added to the usual cost is the expense of night and Sunday work. This means extra cost in the way of compensation to the men and other incidental expenses. Very little relaying was done previous to 1896, and, as a consequence, work which should have been done



COLD WATER FOUNTAIN ON A COOL DAY.

then was begun and completed during the years 1896, 1897 and 1898. This work should never have been delayed as long as it was, as the pipes were found in a poor condition and a source of danger to the community.

The following is the amount of pipe relaid for the last four years:

1895-96.	1896-97.	1897-98.	1898-99.
15,840 feet.	45,408 feet.	36,960 feet.	42,240 feet.

The amount of this relaying that was done in the downtown streets is as follows:

1895-96.	1896-97.	1897-98.	1898-99.
4,000 feet.	15,840 feet.	13,200 feet.	7,920 feet.

The work in the machine, carpenter and blacksmith shops in each of the past three years was very much more than it was in 1895, and the same is true of the general work of the department, such as establishing and abandoning gates, hydrants, air-cocks, water posts, etc., the increase in some instances being from 100 to 200 per cent. over the year 1895. Again, the work has been more varied during the last three years, especially during 1898. In this latter year we built two ice-houses, one at East Boston and the other at Brookline, and cut and stored the ice needed to supply the fountains next summer, built and macadamized roads, established nineteen fountains and abandoned eight. Of the nineteen fountains, eight were cold-water fountains, and two were old fountains to which cold-water attachments were made. In addition to maintaining these cold-water fountains, we have performed a variety of work which the department has not done heretofore.

I am of the opinion that the doing of so much day work has been beneficial to the city, as the work done was of the best quality. This is illustrated by the laying of the salt-water mains for the extra fire service. The department laid about one mile, which, at completion, was tested under a pressure of 180 to 220 pounds to the square inch, and no leak was shown.

The receipts and disbursements of the department for the year were as follows:

Total receipts of the Water Works, from all sources, for the year ending January 31, 1899:

Sales of water	\$2,124,514 30
Shutting off and letting on water and fees	6,776 75
<i>Carried forward</i>	<u>\$2,131,291 05</u>

<i>Brought forward</i>	\$2,131,291 05	
Elevator, fire and service pipes, sale of old materials, etc.	67,819 53	
Boston and Albany R. R. Co., on account of change of road-bed at Lake Cochituate	32,998 00	
¹ Interest on water works fund	72,962 16	
Total receipts	\$2,305,070 74	
Less refunded water rates	4,209 93	
Net receipts		<u>\$2,300,860 81</u>

Total expenditures of the Water Works, from revenue, for the year ending January 31, 1899:

² Current expenses	\$554,959 72	
³ Extension of mains, etc.	253,622 87	
		\$808,582 59
Interest on funded debt	841,792 52	
Sinking-fund requirement, 1897-98	193,395 00	
Metropolitan water assessment	285,600 54	
Amount paid Chelsea, Somerville and Everett, under contracts	9,088 07	
Balance to general revenue account of city	162,402 09	
		<u>\$2,300,860 81</u>

COST OF CONSTRUCTION AND CONDITION OF THE WATER DEBT.

Cost of construction of Water Works to February 1, 1898	\$26,831,753 14
Cost of construction of Water Works to February 1, 1899	22,243,663 40
⁴ Decrease during the year	<u>\$4,588,089 74</u>
Stock on hand February 1, 1898	\$152,665 07
Stock on hand February 1, 1899	137,755 55
Decrease during the year	<u>\$14,909 52</u>
The outstanding Water Loans February 1, 1898, were	\$17,911,273 98
The outstanding Water Loans February 1, 1899, were	17,121,273 98
Decrease during the year	<u>\$790,000 00</u>
The Water Sinking-Fund February 1, 1898, was	\$9,852,760 01
The Water Sinking-Fund February 1, 1899, was	9,487,119 88
Decrease during the year	<u>\$365,640 13</u>

¹ Under order of City Council, approved September 16, 1898.

² One appropriation was made, covering current expenses and extension for the year 1898-99 from revenue. From the amount of \$808,582.59, should be deducted the sums of \$47,798.94, expended for work done for corporations, etc., and \$14,557.91 expended upon portions of system now held by the State, leaving \$746,225.74 as the actual amount expended for current expenses and extension of mains, etc., from revenue. Details will be found on pages 16 and 17.

³ The total amount expended for extension of mains, etc., for the year was \$406,224.50, from which \$152,601.63 was transferred to a new loan of \$200,000 issued in November.

⁴ Decrease due to crediting amount paid by the State on account of taking by Metropolitan Water Board \$5,000,000, and amount received from sale of land on South Boston reservoir site to School Committee, \$23,893.86.



COLD WATER FOUNTAIN ON A HOT DAY.

Net Water Debt February 1, 1898	\$8,058,513 97
Net Water Debt February 1, 1899	7,634,154 10
Decrease during the year	<u>\$424,359 87</u>

SUMMARY OF COST OF WORKS TO FEBRUARY 1, 1899.

Cochituate supply:

Lake Cochituate	\$291,838 35	
Compensating reservoirs	66,859 80	
Land and water damages	248,827 34	
Engineering expenses to January 1, 1852	40,000 00	
Cochituate aqueduct	1,068,425 24	
	<u> </u>	\$1,715,950 73

Sudbury supply:

Reservoir No. 1	\$257,143 81	
“ “ 2	465,954 11	
“ “ 3	419,402 72	
“ “ 4	813,846 38	
“ “ 5, to date	1,114,752 43	
“ “ 6	911,752 33	
Whitehall pond	333,967 57	
Cedar swamp	33,599 21	
Work about Farm pond	17,297 94	
Roadway in Framingham	23,947 32	
Land damages, not otherwise specified	348,346 38	
Water damages	559,190 64	
Temporary connection with Lake Cochituate	75,611 73	
Investigations of Shawshine and Charles rivers, etc.	27,646 59	
Protection of supplies	364,120 82	
Engineering and engineering expenses	300,371 22	
Office expenses, travelling, etc.	80,594 74	
Miscellaneous	40,388 76	
Conduit and connections at Chestnut-Hill Reservoir	3,082,661 95	
	<u> </u>	9,270,596 65

Distributing reservoirs and distribution:

Brookline Reservoir	\$200,077 21
Beacon-Hill “ (net cost)	363,533 21
Chestnut-Hill “	2,284,115 33
South Boston “ (net cost)	67,014 24
East “ “	66,103 09

Carried forward \$2,980,843 08 \$10,986,547 38

<i>Brought forward</i>	\$2,980,843 08	\$10,986,547 38
Distributing reservoirs and distribution. — <i>Continued.</i>		
Parker-Hill Reservoir	205,793 81	
Fisher-Hill “	191,135 35	
Roxbury high service	103,829 53	
Brighton “ “	7,745 00	
East Boston high service	30,208 12	
West Roxbury high service	22,346 56	
Chestnut-Hill pumping-station	525,195 46	
Jamaica-pond aqueduct	88,417 20	
Pipe-yards and buildings	94,832 16	
Engineering expenses	57,873 58	
Distribution	11,297,346 29	
		<u>15,605,566 14</u>

Total cost of Sudbury and Cochituate Works, \$26,592,113 52

Cost of Mystic Works to February 1, 1899 :

Land damages	\$153,211 63	
Dam	\$17,167 26	
Grubbing at lake	9,393 26	
Lowering Mystic river	3,012 06	
		<u>29,572 58</u>
Conduit		129,714 30
Engine-house	\$83,388 75	
Engines	213,834 72	
		<u>297,223 47</u>
Reservoir		141,856 26
Distribution		874,863 58
Buildings		18,603 05
Engineering, inspection and salaries		53,216 27
Mystic-valley sewer		83,608 70
Miscellaneous		24,446 88
		<u>1,806,316 72</u>
Total cost of Mystic Works		\$1,806,316 72
Total cost of combined supplies		\$28,398,430 24
Credit by amount received from the State on account of takings (January 4, 1896, and January 1, 1898)		6,154,766 84
		<u>\$22,243,663 40</u>

The outstanding Water Loans on this date, February 1, 1899, are as follows :

Loans.		Date of	Amount.
per cent.	Currency,	Maturity.	
6	Due	April, 1899	\$250,000 00
6	"	Jan., 1901	625,000 00
6	"	April, 1901	688,000 00
6	"	July, 1901	330,000 00
6	"	July, 1902	100,000 00
5	"	Sterling Loan, (£399,500)	
6	"	Oct., 1902	1,947,273 98
6	"	April, 1903	905,000 00
6	"	Jan., 1904	8,000 00
6	"	April, 1904	38,000 00
6	"	Jan., 1905	161,000 00
6	"	April, 1905	142,700 00
6	"	July, 1905	44,000 00
6	"	Oct., 1905	6,000 00
5	"	Oct., 1905	1,000,000 00
6	"	Jan., 1906	82,550 00
6	"	April, 1906	8,750 00
5	"	April, 1906	552,000 00
5	"	Oct., 1906	2,000,000 00
6	"	Oct., 1906	4,000 00
6	"	Jan., 1907	8,000 00
6	"	April, 1907	5,000 00
6	"	July, 1907	1,000 00
5	"	Oct., 1907	1,000 00
5	"	April, 1908	12,000 00
4	"	April, 1908	588,000 00
4	"	July, 1909	82,000 00
4 $\frac{1}{2}$	"	Oct., 1909	268,000 00
4	"	April, 1910	280,000 00
4	"	April, 1912	324,000 00
4	"	July, 1913	111,000 00
4	"	Oct., 1913	336,000 00
4	"	Jan., 1914	466,000 00
4	"	April, 1914	18,500 00
4	"	Oct., 1914	16,000 00
4	"	Jan., 1915	50,000 00
3 $\frac{1}{2}$	"	April, 1915	50,000 00
4	"	April, 1915	145,700 00
3 $\frac{1}{2}$	"	Oct., 1915	50,000 00
4	"	Oct., 1915	23,000 00
3 $\frac{1}{2}$	"	Jan., 1916	100,000 00
4	"	Jan., 1916	58,000 00
4	"	April, 1916	128,500 00
3 $\frac{1}{2}$	"	July, 1916	75,000 00
3 $\frac{1}{2}$	"	Oct., 1916	25,000 00
4	"	Oct., 1916	286,300 00
4	"	Jan., 1917	21,000 00
3	"	April, 1917	200,000 00
3 $\frac{1}{2}$	"	April, 1917	275,000 00
4	"	April, 1917	161,000 00
4	"	July, 1917	7,000 00
4	"	Oct., 1917	160,700 00
4	"	Jan., 1918	20,000 00
4	"	April, 1918	6,300 00
3 $\frac{1}{2}$	"	July, 1918	100,000 00
4	"	Oct., 1918	100,000 00

Carried forward,

\$13,451,273 98

Loans.				Date of Maturity.	Amount.
<i>Brought forward,</i>					\$13,451,273 98
4	per cent.	Loan,		Due April, 1919 . . .	200,000 00
3 $\frac{1}{2}$	"	"	"	" Oct., 1919 . . .	145,000 00
4	"	"	"	" Oct., 1919 . . .	300,000 00
3 $\frac{1}{2}$	"	"	"	" Nov., 1919 . . .	130,000 00
3 $\frac{1}{2}$	"	"	"	" Jan., 1920 . . .	220,000 00
4	"	"	"	" Oct., 1920 . . .	384,000 00
4	"	"	"	" April, 1921 . . .	100,000 00
4	"	"	"	" Oct., 1921 . . .	162,500 00
4	"	"	"	" Jan., 1922 . . .	100,000 00
4	"	"	"	" April, 1922 . . .	75,000 00
4	"	"	"	" Oct., 1922 . . .	283,000 00
4	"	"	"	" Oct., 1923 . . .	576,275 00
4	"	"	"	" Oct., 1924 . . .	644,225 00
3 $\frac{1}{2}$	"	"	"	" Oct., 1927 . . .	150,000 00
3 $\frac{1}{2}$	"	"	"	" Oct., 1928 . . .	200,000 00
Total					<u>\$17,121,272 98</u>

SUMMARY.					
3	per cent.	Loans			\$200,000 00
3 $\frac{1}{2}$	"	"			1,520,000 00
4	"	"			6,214,000 00
4 $\frac{1}{2}$	"	"			268,000 00
5	"	Currency Loans			13,000 00
5	"	Gold "			3,552,000 00
5	"	Sterling "			1,947,273 98
6	"	Loans			3,407,000 00
Total					<u>\$17,121,273 98</u>

Cochituate Water Debt, Gross and Net,

At the Close of Each Fiscal Year.

Fiscal Year.	Gross Debt.	Sinking-Funds.	Net Debt.
1847-48	\$2,129,056 32 ¹	.....	\$2,129,056 32
1848-49	3,787,328 98	.....	3,787,328 98
1849-50	4,463,205 56	.....	4,463,205 56
1850-51	4,955,613 51	.....	4,955,613 51
1851-52	5,209,223 26	.....	5,209,223 26
1852-53	5,972,976 11	.....	5,972,976 11
1853-54	5,432,261 11	.....	5,432,261 11
1854-55	5,403,961 11	.....	5,403,961 11
1855-56	5,230,961 11	.....	5,230,961 11
1856-57	5,031,961 11	.....	5,031,961 11
1857-58	4,724,961 11	.....	4,724,961 11
1858-59	4,754,461 11	.....	4,754,461 11
1859-60	3,846,211 11	.....	3,846,211 11
1860-61	3,455,211 11	.....	3,455,211 11
1861-62	3,012,711 11	.....	3,012,711 11
1862-63	2,992,711 11	.....	2,992,711 11
1863-64	2,992,711 11	.....	2,992,711 11
1864-65	2,942,711 11	.....	2,942,711 11
1865-66	3,152,711 11	.....	3,152,711 11
1866-67	3,370,711 11	.....	3,370,711 11
1867-68	3,867,711 11	.....	3,867,711 11
1868-69	5,107,711 11	.....	5,107,711 11
1869-70	5,731,711 11	.....	5,731,711 11
1870-71	6,482,711 11	\$1,100,000 00	5,382,711 11
1871-72	6,812,711 11	1,185,049 67	5,627,661 44
1872-73	6,912,711 11	1,268,234 97	5,644,476 14
1873-74	7,863,711 11	1,372,953 62	6,490,757 49
1874-75	8,123,711 11	1,533,890 28	6,589,820 83
1875-76	9,735,711 11	1,560,917 83	8,174,793 28
1876-77	11,548,711 11	1,709,492 60	9,839,218 51
1877-78	11,545,273 98	2,043,764 73	9,501,509 25
1878-79	11,753,273 98	2,143,847 85	9,609,426 13
1879-80	11,697,273 98	1,771,692 92	9,925,581 06
1880-81	11,631,273 98	1,989,300 88	9,641,973 10
1881-82	11,631,273 98	2,281,857 89	9,349,416 09
1882-83	11,955,273 98	2,607,768 46	9,347,505 52
1883-84	12,882,273 98	2,746,505 58	10,135,768 40
1884-85	13,045,473 98	3,106,323 82	9,939,150 16
1885-86	13,491,473 98	3,385,201 26	10,106,272 72
1886-87	14,142,273 98	3,947,616 92	10,194,657 06
1887-88	14,741,273 98	4,373,304 09	10,367,969 89
1888-89	14,941,273 98	4,864,092 54	10,077,181 44
1889-90	15,696,273 98	5,440,819 47	10,255,454 51
1890-91	16,267,773 98	5,979,297 80	10,288,476 18
1891-92	16,423,773 98	6,471,545 34	9,952,228 64
1892-93	16,758,773 98	7,019,058 38	9,739,715 60
1893-94	17,055,273 98	7,649,504 87	9,405,769 11
1894-95	17,761,273 98	8,444,773 55	9,316,500 43
1895-96	18,261,273 98	9,099,966 39	9,161,307 59
1896-97	18,261,273 98	9,704,387 99	8,556,885 99
1897-98	17,911,273 98	9,852,760 01	8,058,513 97
1898-99	17,121,273 98	9,487,119 88	7,634,154 10

¹ No account taken of amounts borrowed temporarily from 1846 to 1852 and afterwards funded by the issue of the water bonds that figure in this statement.

Cochituate Water Sinking-Fund Receipts.

[SINCE THE ESTABLISHMENT OF THE BOARD OF SINKING-FUND COMMISSIONERS IN 1871.]

YEAR.	From Tax Levy or City Income.	Interest on Investments.	Interest on Bank Deposits.	Water- Rates, etc.	Premiums on Loans.	Other Sources.	Totals.
1871. April 30, received from Committee on Re- duction of Debt.....	\$1,100,000 00.						\$1,100,000 00
1871-72.....	14,325 00 9,975 00 Taxes,	\$61,000 00	\$349 67				85,049 67
1872-73.....	9,000 00	70,137 50	1,017 80				80,155 30
1873-74.....	30,090 00	76,799 60	2,072 65				108,962 25
1874-75.....	75,973 28	82,842 25	2,121 13				160,936 66
1875-76.....	65,554 00	85,470 00	3,617 55			\$386 00	155,027 55
1876-77.....	234,814 00	86,245 66	4,119 47	\$26,480 18		915 46	352,574 77
1877-78.....	Taxes, 214,500 00	85,830 85	10,809 31	27,099 92			338,240 08
1878-79.....	Taxes, 207,456 00	93,264 49	6,181 26	177,195 91		9,874 21	493,971 87
1879-80.....		90,472 42	5,687 62	214,707 24		4,411 64	315,278 92
1880-81.....		86,460 00	167 32	195,668 90		1,762 04	284,058 26
1881-82.....		96,546 35	2,767 90	193,840 36		494 08	293,648 69

WATER DEPARTMENT.

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1882-83.....		105,129 51	8,486 33	219,581 72		1,241 04	331,438 60
1883-84.....	Taxes, 973 00	138,120 90	2,268 22				141,362 12
1884-85.....	.....	143,049 45	7,510 40	209,258 39	.....	.....	359,818 24
1885-86.....	.....	156,694 01	5,804 31	130,129 12	.....	442 27	283,069 71
1886-87.....	Taxes, 75,496 00	181,264 89	2,644 70	297,928 95	.....	5,081 12	562,415 66
1887-88.....	.....	199,883 90	4,178 16	221,620 11	.....	.....	425,682 17
1888-89.....	.....	213,048 22	8,958 69	256,013 57	\$11 552 50	.....	489,572 98
1889-90.....	.....	228,000 83	11,730 60	300,903 00	36,092 50	.....	576,726 93
1890-91.....	.....	229,509 17	29,763 94	242,675 22	36,530 00	.....	538,478 33
1891-92.....	.....	175,808 33	22,560 16	275,014 05	.....	78,865 00	552,247 54
1892-93.....	.....	260,506 20	30,148 34	240,435 00	16,413 50	.....	547,503 04
1893-94.....	.....	298,224 44	18,133 03	299,467 27	14,621 75	.....	630,446 49
1894-95.....	.....	312,332 05	18,524 22	297,518 29	.....	9,894 12	638,268 68
1895-96.....	.....	378,819 55	5,892 29	205,791 00	64,690 00	.....	655,192 84
1896-97.....	.....	403,840 02	5,225 08	194,740 00	.....	616 50	604,421 60
1897-98.....	.....	421,928 45	8,337 21	193,395 00	8,833 50	15,877 86	648,372 02
1898-99.....	.....	417,142 02	5,806 85	193,395 00	.....	8,016 00	624,359 87
\$2,037,556 28		\$5,178,371 06	\$234,884 21	\$4,599,858 20	\$188,733 75	\$137,877 34	\$12,377,280 84

DETAILED EXPENDITURES UNDER THE SEVERAL APPROPRIATIONS.

FEBRUARY DRAFT, 1898, TO FEBRUARY DRAFT, 1899.

Current Expenses, Extension of Mains, etc. (from Revenue).

Salaries :		
Commissioner	\$5,000 00	
Assistant Commissioner	3,000 00	
Secretary	3,000 00	
Employees	631,230 77	
		\$642,230 77
Water-pipes and castings		151,759 15
Lead and lead pipe		23,854 51
Travelling expenses and transportation of em- ployees		17,334 95
Blasting and excavating trenches		15,391 64
Tools, machinery, iron, steel and other materials for repairs and furnishing		14,392 54
Horses, purchase of	\$475 00	
Feed and board	5,191 37	
Shoeing and veterinary services	2,808 97	
Wagons, etc., and repairs of same	2,620 68	
Harnesses and repairs	2,102 32	
		13,198 34
Teaming and freights		8,635 76
Land damages		8,288 51
Repairs of buildings, streets and other structures, Fuel		8,127 27
		7,533 70
New meters and repairs		7,224 46
Lumber		6,223 71
Printing		5,726 53
Services and expenses of counsel in connection with settlement of claim against the State		4,662 51
Damages		3,837 61
Professional and expert services		2,648 57
Gravel and crushed stone		2,279 05
Inspection of castings at foundries		2,189 83
Report on property taken by the State		2,000 00
Stationery and postage		1,428 50
Sanitary at Chestnut Hill reservoir		1,348 00
Telephone service		1,314 73
Salt		1,054 67
Bricks		787 13
Board of injured man		782 17
Oils		728 48
Covering water-pipes with felting		707 50
Rents		675 00
<i>Carried forward</i>		\$956,365 59

<i>Brought forward</i>	\$956,365 59
Manure	533 00
Removing water-pipes from Federal street	528 00
Furniture	502 20
Cement and sand	500 69
Gas	496 53
Taxes	479 98
Water-proof clothing	335 34
Advertising	301 20
Examination of accounts	300 00
Electric lighting	275 50
Town of Brookline, temporary supply of water for West Roxbury	244 00
Suffolk Registry, recording papers	148 85
Drain-pipe	75 41
Ice	57 20
Salt hay	21 25
Water-rates, Framingham and Medford	19 48
	\$961,184 22
Less amount transferred to new loan, Extension of Mains, etc.	152,601 63
	\$808,582 59
Refunded water-rates	4,209 93
Sinking-fund payment	193,395 00
Interest on loans	841,792 52
Metropolitan water assessment	285,600 54
Proportion of water-rates paid under contract	9,088 07
	<u>\$2,142,668 65</u>

From the above amount of \$961,184.22 should be deducted \$47,798.94, expended for corporations, etc., and \$14,557.91, expended upon portions of the system now held by the State, leaving the amount of \$898,827.37 as the total actual expenditure for current expenses and extension of mains, etc.

EXTENSION OF MAINS, ETC. (FROM LOANS).

Amount transferred from expenditures from revenue, as above	<u>\$152,601 63</u>
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Additional Supply of Water.

Land damages on account of Whitehall pond	<u>\$2,992 11</u>
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The balance of the appropriation for Additional Supply of Water on February 1, 1898, was \$300. To this balance was added a transfer of \$2,692.11 from the appropriation for Mystic Water Works, Land, etc. The balance of the latter appropriation, amounting to \$951.64, was transferred to the appropriation for Playground, North End.

* Sept. 22,	{ McNeal Pipe and Foundry Co., Burling- ton, N. J. }	{ 15 tons 4-inch B pipe 200 " 6-inch " " 150 " 8-inch " " 100 " 10-inch " " 535 " 12-inch " " 1,000 "	@ \$16.03 per ton 2,000 lbs., esti- mated, \$16,030	7,848 29	8,884 04	16,732 33
* " 22,	Total, M. F. Sullivan	Building sanitary at Chestnut Hill Reservoir ..	\$1,300, estimated .....	.....	1,348 00	1,348 00
* Nov. 8,	{ George H. Stoddard and Gardner T. Voorhees.. }	{ Covering 20-inch water-pipe on Cottage Farm bridge with additional covering of felt and rosin	\$225 .....	.....	225 00	225 00
* Dec. 3,	Thomas Burke	Blasting, Columbia road, Dorchester	\$9.00 per cubic yard .....	.....	26 10	26 10
* " 17,	"	" Ritchie street, Roxbury	\$8.75 " " .....	.....	46 38	46 38
* Dec. 23,	John J. Kelley	{ Blasting, Patten, Rodman and Wachusett streets, West Roxbury	@ \$2.57 per cubic yard .....	.....	597 78	597 78
* " 28,	Thomas Burke	Blasting, Geneva avenue, Dorchester	@ \$2.74 per cubic yard .....	.....	272 63	272 63
1898. * Jan. 5,	John C. Coleman & Son..	{ Excavating and refilling water pipe trenches, Columbia road, Dorchester.... }	{ 55 cents per cubic yard for earth excavation and refilling.... \$1.49 per cubic yard for rock ex- cavation and refilling .....	.....	3,365 04 + 1,676 78	5,041 82
* Jan. 13,	John J. Kelley	{ Blasting, Maple-street extension, West Roxbury	\$3.38 per cubic yard .....	.....	141 69	141 69
* " 21,	James McLaughlin & Son,	Blasting, Bellevue street, Dorchester	3.50 per cubic yard .....	.....	85 05	85 05
* " 26,	O'Brien & Byrne	{ Blasting, Wabon and Wabeno streets, Rox- bury	2.35 per cubic yard .....	.....	133 01	133 01
* Feb. 23,	James McLaughlin & Son,	Blasting, Hillsdale street, Dorchester	4.09 per cubic yard .....	.....	172 80	172 80
* Mar. 9,	Thomas Burke	" Dudley street, Dorchester	2.49 per cubic yard .....	.....	61 01	61 01
* " 14,	Thomas Burke	" Geneva avenue, Dorchester	1.88 per cubic yard .....	.....	89 86	89 86

Contracts Made and Pending during Year. — *Continued.*

DATE.	CONTRACTORS.	WORK.	AMOUNT.	PAID ON CONTRACT.	
				Previous Years.	Total.
1887.					
Mar. 14,	{ Warren Foundry and Machine Company, Phillipsburg, N. J.	{ 270 tons 36-inch pipe, Class A. 500 " 24-inch " A. 150 " 24-inch " B. 830 " 20-inch " A. 100 " 20-inch " B. 850 " 16-inch " A. 410 " 12-inch " A. 980 " 12-inch " B. 230 " 10-inch " A. 500 " 8-inch " B. 760 " 8-inch " B. 20 " 6-inch " B. 5,600 tons pipe. 100 " Special Castings.	{ @ \$16.75 per ton, 2,000 lbs., estimated total of contract, \$97,100 @ \$33 per ton, 2,000 lbs., 721,000 lbs. @ 1 $\frac{13}{16}$ cents per lb., estimated total of contract, \$13,626.90 640,000 lbs. @ 1 $\frac{3}{16}$ cents per lb., estimated total of contract, \$9,024 { 34 cents per ton, short haul. { 74 cents per ton, long haul.	\$83,678 75	\$83,678 75
Mar. 18,	{ Sessions Foundry Co., Bristol, Conn.	{ Iron Castings for year ending March 15, 1889. (Contract No. 1).	{ 721,000 lbs. @ 1 $\frac{13}{16}$ cents per lb., estimated total of contract, \$13,626.90	12,004 56	12,004 56
" 18,	{ Mechanics' Iron Foundry Co., Boston, Mass.	{ Iron Castings for year ending March 15, 1889. (Contract No. 2).	{ 640,000 lbs. @ 1 $\frac{3}{16}$ cents per lb., estimated total of contract, \$9,024	9,613 45	9,613 45
" 18,	Matthew E. Nawn.	{ Teaming water pipes and materials for year ending March 15, 1889.	{ 34 cents per ton, short haul. { 74 cents per ton, long haul.	1,528 47	1,528 47
" 30,	{ John H. McCafferty & Co.	{ Composition Castings for year ending March 15, 1889. No. 1, 3,500 lbs, estimated No. 2, 33,000 " " No. 3, 5,500 " " Total. 48,000 " "	{ No. 1, @ 17 $\frac{1}{2}$ cents per lb. = \$1,568 75 No. 2, @ 16 cents per lb. = 5,280 00 No. 3, @ 13 cents per lb. = 715 00 Total. \$7,563 75	5,209 45	5,209 45

* April 9,	Coffin Valve Co.....	{ 4 36-inch valves, @ \$438.50 each..... 4 30-inch valves, @ 312.50 each..... 5 24-inch valves, @ 178.00 each..... 10 20-inch valves, @ 142.00 each..... }	\$5,314.....	5,314 00	5,314 00
April 18, modified, May 9,	{ Warren Foundry and Machine Company, Phillipsburg, N. J..... }	{ 870 tons 12-inch B Water-Pipe. Contract of April 18, 1898, modified, viz.: 717 tons 12-inch B..... 250 tons 16-inch B..... (12-inch pipe to be delivered at Atlantic, Mass., Station.) 70 tons additional 16-inch B pipe or- dered July 26, 1898..... }	@ \$17.60 per ton, (Total of contract 2,000 lbs., as modified, @ \$17 per ton, 2,000 lbs., \$16,869.20 @ \$17 per ton, 2,000 lbs., 1,190.00 Total, \$18,059.20)	15,696 80	15,696 80
* April 23,	Thomas Burke.....	Blasting, Cherokee street, Roxbury.....	\$3 per cubic yard.....	280 20	280 20
* May 20,	John F. Kelley.....	Blasting, Gould street, West Roxbury.....	\$3.19 per cubic yard.....	98 89	98 89
" 20,	John McShane.....	{ Hauling 12-inch water-pipes from Neponset Station for new line to Moon Island..... }	@ 75 cents per ton of 2,240 lbs.....	477 81	477 81
* June 8,	James McLaughlin & Son,	Blasting, Magnolia street, Dorchester.....	@ \$2.60 per cubic yard.....	63 58	63 58
* " 20,	John F. Kelley.....	Blasting, Inley road, West Roxbury.....	{ @ \$2 per cubic yard..... Contract taken from Kelley and completed by Thomas Burke for }	192 40 361 25	192 40 361 25
* July 5,	O'Rourke & Nelson.....	{ Removing 12-inch water main and fixtures in Federal street, between Kneeland street and Federal-street bridge, and de- livering same at Albany-street yard..... }	@ 50 cents per linear foot.....	528 00	528 00
* " 18,	Thomas Burke.....	Blasting, Harold street, Roxbury.....	@ \$2.60 per cubic yard.....	118 82	118 82
* " 27,	" "	Blasting, Half-Moon street, Dorchester.....	@ \$2.38 per cubic yard.....	318 21	318 21
* Aug. 8,	Coffin Valve Co.....	{ 5 5-inch Coffin gate-hydrants (for new pipe line to Moon Island)..... }	@ \$31 each.....	155 00	155 00

Contracts Made and Pending during Year. — *Concluded.*

DATE.	CONTRACTORS.	WORK.	AMOUNT.	PAID ON CONTRACT.		
				Previous Years.	Year 1898.	Total.
1898. Aug. 31,	H. P. Nawn.....	{ Blasting and removing rock from water-pipe trenches, Columbia road, Section 2, } Dorchester.....	@ \$2 per cubic yard.....	.....	\$1,276 00	\$1,276 00
* Sept. 19,	O'Rourke & Nelson.....	{ Laying 16-inch and 6-inch pipes in same trench, Columbia road, Dorchester..... } Removing 16-inch pipe.....	@ \$1 per linear foot..... @ 80 cents per linear foot.....	.....	1,727 54 + 40 20	1,767 54
* " 22,	Thomas Burke.....	Blasting, Hewins street, Dorchester.....	@ 3.75 per cubic yard.....	.....	107 25	107 25
* Oct. 1,	O'Rourke & Nelson.....	{ Removing 20-inch water-pipes in Columbia road, Dorchester, between Upham's Corner and Edward Everett square, and delivering same at Albany-street yard, in good condition..... }	{ N. B.—Settlement to this contract included in the estimate, first and final, and payment made for contract dated Sept. 19, 1898, as noted above. }	.....	.....	.....
" 10,	H. P. Nawn ...	{ Rock excavation from water-pipe trench, } Columbia road, between Quincy and Dudley streets, Dorchester.....	@ \$2.00 per cubic yard.	.....	.....	.....
* " 11,	Thomas Burke.....	Blasting, Gayland avenue, Dorchester.....	\$4.50 " " " "	.....	205 55	205 55
* " 11,	" " " "	" Devon street, " " " "	\$2.38 " " " "	.....	192 54	192 54
* " 19,	Patrick Cushing.....	" Magnolia square, " " " "	\$3.40 " " " "	.....	74 80	74 80
" 31,	" " " "	" Angell street, West Roxbury.....	\$4.00 " " " "	.....	.....	.....
Nov. 26,	O'Rourke & Nelson.....	{ Removing 1,700 linear feet 12-inch pipe from Columbia road, and delivering same at Squantum, Mass..... } Laying above pipe (1,700 feet) and 4,400 feet already delivered; total, 6,100 feet.....	@ 43 cents per linear foot. @ 55 " " " "	.....	.....	.....

"	28,	H. P. Nawn.....	{ Blasting, Geneva avenue, Dorchester, be- tween Columbia road and Blue Hill ave... }	@ \$2.00 per cubic yard.
Dec.	12,	Donovan & Co.	{ Stone and brick work for foundations for ice-house, East Boston, viz.: Stone in place, dry..... Brick-work, in mortar, in place	\$3.85 per perch. \$15.25 per M.
"	14,	Daniel E. Lynch.....	Blasting, Draper street, Dorchester.....	\$3.50 per cubic yard.
"	17,	John O'Brien.....	" Rockwell street, Dorchester	\$2.47 " " "
"	20,	Thomas Burke.....	" Potosi street, Dorchester	\$3.74 " " "
1899.	Jan.	H. P. Nawn.....	{ Laying about 1,600 feet 36-inch water-pipe in Geneva avenue, between Columbia road and Washington street, Dorchester.. For earth excavated and refilled..... For refilling where rock has been exca- vated.....	@ 75 cents per linear foot. @ \$1.00 per cubic yard. @ 25 cents per cubic yard.
"	20,	O'Rourke & Nelson.....	{ Laying about 3,000 feet 16-inch pipe in Co- lumbia road, South Boston	@ \$1.05 per linear foot.
"	24,	Thomas Burke.....	Blasting, Stanley street, Dorchester.....	@ \$4.00 per cubic yard.
"	25,	{ Warren Foundry and Machine Company, Phillipsburg, N. J.....	{ 550 tons 30-inch pipe	@ \$16.70 per ton } estimated total of contract, \$83,561.50
			125 " 24-inch "	
			975 " 16-inch "	
			2,300 " 12-inch "	
			30 " 10-inch "	
			875 " 8-inch "	@ \$33.00 per ton 2,000 lbs.
			500 " 6-inch "	
			20 " 4-inch "	
			5,335 " pipe.....	
			105 " special castings.....	

In the appendices annexed hereto are submitted the reports of the City Engineer and the superintendents of the department. They furnish full details of the present condition of the works and what has been accomplished.

Respectfully,

JOHN R. MURPHY,
Water Commissioner.

APPENDIX A.

I.

BOSTON, February 27, 1896.

HON. JOHN R. MURPHY,

Water Commissioner of Boston :

DEAR SIR, — As requested by you, we have made an examination of the cash transactions of the Water Department of the city of Boston, and have reached the following conclusions. In the first place it may be well to give the reasons for the receipt and payment of money in the office of the Water Commissioners, and to describe as briefly as possible the methods pursued in the handling of it.

The system of "Money Deposits" in your department originated (by vote of the Water Board) because of losses incurred by the city through furnishing labor and material, and afterwards not being reimbursed for the outlay. The amount of money in each instance required for deposit is governed by rules made by the Water Commissioners — a fixed sum being required in some cases, in others the amount of work and material furnished forming the basis for the charge. These sums of money are held by the Water Department as security, pending the execution of the various jobs. Upon the completion of the work, and the payment of the bills therefor, the amounts which have been advanced are refunded upon application. For instance, to be more explicit, for "Service Pipes" (until recently) a deposit of \$20 has been required; for elevators, motor pipes, repairs of service pipes between street mains and street lines, and for sales of old materials, deposits have been required according to estimates. Recently the rule in regard to furnishing $\frac{1}{2}$ -service pipes has been changed, so that all that is now required is a deposit of \$10, for which amount the city guarantees to do the necessary work. The greater part though of the "Deposit Money" has been, and is, obtained from deposits upon "Main Pipes." In all instances before the main pipes are laid in a street the cost of the work is determined, as nearly as possible, and if the income will not equal 5 per cent. for five years, or 25 per cent. of the amount invested

by the city, the applicant is obliged to deposit the difference between the income assured and 5 per cent. for five years on the investment. As soon as the amount required is being guaranteed the city by increase of income, the amount of the deposits is refunded. If at the expiration of five years the amount received has not equalled the 5 per cent. necessary, the deficit is forfeited to the city. In addition to the sums derived from deposits as above stated, money is received from rents of houses and pastures, and from sales of grass and certain other odds and ends. This money, together with the balances of deposits on main pipes, and the money now received from service pipes, is turned over to the City Collector from time to time. As nearly as it was possible for us to determine, up to 1892, the average amount of money held by the Water Board was about \$5,000. Since that time the amount has averaged about \$15,000. The bulk of the money has been kept in either the First or the Central National Bank of this city, but no interest has been obtained upon it at any time from either of these banks. Upon an average balance of \$5,000 kept during the past year with the Beacon Trust Company, interest has been allowed, but we fail to see why interest was not secured by the Commissioners from the other banks, as it is the common custom to require interest on all funds of the city deposited in banks.

As the consequence of this neglect the city is poorer by many hundreds, if not some thousands of dollars.

The cash accounts of the Water Department have been kept by the Clerk of the Board, and he has had the entire care of the moneys, subject to the orders of the Commissioners. The bank deposits stand in his name as clerk, and he alone has the power to draw checks. Of his absolute fidelity we have, after close scrutiny, no question, but of the discretion of the members of the Water Board for the past twenty years, we have some. Only the faithfulness of the custodian of these funds has stood between the city and possible heavy losses, for at times the balance in his hands has been as large as \$25,000, and his accounts, until now, have not been audited for thirteen years. Furthermore, these funds, which should have remained untouched, except for the purposes for which they were established, have been used by the members of the Board for payment for current expenses. To be sure, the money so taken was afterwards returned at intervals by its repayment by the City Treasurer on vouchers, but the practice is pernicious and fraught with danger, and should be immediately discontinued. Doubtless some money is needed in the office for petty expenses, but a small contin-

gent fund would serve all purposes. The easy accessibility of so much ready money has apparently had a tendency to wastefulness, and a decided extravagance in expenditure has been the rule during the past few years. The deposit money should be used for no purpose whatever but for the redemption of the receipts outstanding against it.

The following table shows the amounts spent year by year since 1889 by the Water Boards for travelling and miscellaneous expenses, and are instructive by way of comparison. The miscellaneous expenses are chiefly for entertainment and expenditures in connection with trips to the water works :

	Travelling.	Miscellaneous.	Total.
1889-90	\$1,599 40	\$1,156 32	\$2,755 72
1890-91	976 93	1,129 39	2,106 32
1891-92	1,982 72	792 09	2,774 81
1892-93	2,332 08	1,077 70	3,409 78
1893-94	2,486 54	3,868 81	6,355 35
1894-95	3,988 83	4,300 48	8,289 31
1895-96	2,288 35	4,046 02	6,334 37
	\$15,654 85	\$16,370 81	\$32,025 66

Our examination of Mr. Swan's accounts has covered a period of about five years, and has been thorough, and we have adjusted and balanced his books up to the present time. We found very few errors, and everywhere indications of care and painstaking. He has in his possession all the money his books call for, and \$27.02 to spare. To be sure that all the money received from rents and sales of materials and forfeited balances on main pipe deposits, etc., had gone into the City Treasury, we checked all the items of such character for a period of three years from the books of the Clerk of the Water Department to the books of the City Collector, and found that every sum had been properly accounted for in that office. There are improvements that can and ought to be made in the methods of transacting this money deposit business and in the way of keeping the accounts, and about those matters, as you have requested, we will make suggestions later.

Our time has been so occupied with the investigation of the cash transactions, hereinbefore alluded to, that the thorough examination in the methods of the general books, which involve no money matters, directly, has been held in abeyance. We will look into that and report specifically. The

subject matter of these books is mainly the recording of bills of all material purchased for the department—all bills being rendered in duplicate, one of which, approved by the Board, goes to the City Auditor, and being, in due course, paid by the Treasurer.

Our opinion is that these books and methods can be abridged, much in the direction of simplicity, perspicacity and economy.

The methods of the "Income Division" will be looked into with the view of criticism, abridging, altering or improving, if such seems to be necessary. It would have been done this week, but the rush of business always attendant upon the last week in February, when the sixty days' grace expire, rendered the books practically inaccessible.

Very respectfully,

(Signed)

R. McLAUGHLIN AND
ANDREW STEWART.

II.

Boston, March 11, 1896.

HON. JOHN R. MURPHY,

Water Commissioner of Boston :

DEAR SIR, — Having completed our investigation of the cash transactions of the Income Division of the Water Department, formerly known as the Water Registrar's Department, we respectfully submit to you our report as follows :

The period covered by this examination began about the time the Water Department was divided by ordinance in 1890. By this division two departments, known respectively as the Water Income Department and the Water Supply Department, were created. The Water Board had charge of the Supply Department, and the Income Department was under the control of the Water Registrar, and thus the two distinct departments existed up to July 1, 1895, when the act consolidating the departments under the control of one Water Commissioner took effect.

Under date of February 27, we reported our conclusions as to the management of the cash affairs of the Supply Department, and the present report has reference only to the cash transactions of the Income Department.

At the time our investigation began, and up to June, 1892, Mr. Davis was Water Registrar, and the purposes for which deposits of money were received in his department were almost identical with those of the Supply Department, which were set forth in detail in our other report. The system and methods used in conducting this business during the above period were, in our opinion, very inadequate and most unbusinesslike. The balances of deposits due the city, and the balances due the depositors, should have been kept entirely separate, the former eventually to be sent to the City Collector's, and the latter held in the control of the Registrar, to be paid the holders of receipts upon application. Instead, the method pursued was to send the balances due the depositors — if they delayed at all about calling for them — as well as the amounts due the city, to the City Collector, and when the owners of the balances so treated, subsequently from time to time presented their receipts at the Registrar's office for redemption, they were paid apparently out of the money which the Registrar at the time happened to have on hand — funds really applicable, of course, to later deposits. At the conclusion of Mr. Davis's incumbency all the money in the office, which was composed chiefly of amounts, the final disposition of which had not at the time been determined, was dumped into the Collector's instead of being turned over to the incoming Registrar. The result of this was that all the balances due depositors at that time were tied up in the Treasurer's hands, their final resting place probably having been in the Sinking Fund. Thus Mr. Doherty began his term completely handicapped, with no money at all on hand to meet the claims of the holders of receipts with balances due them. In that condition the matter has remained to the present day, resulting of course in reproach being cast upon the department because of receipts presented not being honored, and in the loss, so far, to the depositors of the sums due them. To adjust these accounts accurately would require certainly weeks of time, and the amount involved is not large enough to warrant the required expenditure upon the part of the city. We think, though, that some arrangement should be made so that outstanding receipts could be redeemed upon presentation, and would suggest that the simplest way would be to have the holders of these old receipts render bills for the amounts due them, these bills to be paid out of the Water Department appropriation. We saw no evidence whatever of any dishonesty, and have reason to believe there was none, but the methods

pursued were such that confusion and annoyance were inevitable.

After Mr. Doherty became Registrar, which was in July, 1892, the question arose as to which department ought to receive deposits for pipes, etc., other than main pipes, and the matter was finally decided by the Water Board assuming control of these funds, so that from January, 1893, to July, 1895, all deposit moneys were received in the office of the Water Commissioners, and the moneys received by the Water Registrar were confined to amounts paid for the letting on and shutting off of water, and occasional sums for the use of water from hydrants for contractors or for travelling shows. For the six months or so that Mr. Doherty had the charge of the general money deposits of the Registrar's Department — though he had to begin under great disadvantages, as stated — there was an improvement in the system, and it was possible for us to prove the accuracy of his accounts to our entire satisfaction. Since July, 1895, when the Water Registrar's Department became the Income Division of the Water Department, there have been no receipts of money in that division except for letting on and shutting off water. For the six months ending December 31, 1895, the total amount received from these sources was only about \$1,000. The custom is to turn over these receipts to the City Collector once a week. Owing to the peculiar nature of this income we see no better way of collecting it than that now in operation, but would suggest that the money received in these ways be paid to the City Collector daily instead of weekly, and thus any danger of loss to the Water Department from the handling of it would be infinitesimal.

We will continue our examination into the other branches of the Water Department, as arranged, as rapidly as possible, and report our findings to you at our earliest convenience.

Very respectfully,

(Signed)

R. McLAUGHLIN AND
ANDREW STEWART.

III.

BOSTON, May 21, 1896.

HON. JOHN R. MURPHY,

Water Commissioner:

DEAR SIR, — We present you herewith our final report of the investigation of the book-keeping and accounting affairs

of the Water Department of the city of Boston, the same being supplementary to our reports to you of the twenty-seventh of February and eleventh of March, 1896.

GENERAL OFFICE.

The scheme of the books kept in the office of the Water Commissioner is very good, though it impressed us as being somewhat over-elaborated, yet as no information is furnished by the books that may not be desired at some time, we did not think it best to suggest much here in the way of change. These are the central books of the system of accounts of the Water Department, the books elsewhere being tributary to them, so that all matters pertaining to the finances of the department converge here. We made an audit of them for the period of one year, and were able easily to prove their correctness, one with another, and all with the Auditor. The work has been and is being admirably done. There is every evidence of this, and no evidence of anything else.

INCOME DIVISION.

We found the general system of work in this office satisfactory, but the application of it not altogether so. The books were more than sufficiently expansive in some ways, and yet lacked very desirable detail. Not enough attention had been paid, either, to the necessity of having the accounts tally with those of the Collector. The mass of detail in this office is something enormous, the books and papers dealing largely with matters of record and reference and schedules. We have made a careful survey of all things pertaining to this office, and feel satisfied that when the changes in methods and books contemplated by the Superintendent are made, — all of which have our hearty approval, — all necessary information will be easily obtainable. We think that the meter books kept by Mr. Freeman are not at all indispensable, as there are regular department books which deal with the same subject in an adequate manner.

EASTERN DIVISION.

At the headquarters of this division on Albany street, some of the most essential clerical work of the department is performed. The necessity for efficient service there is very great, and for this reason, and also because we soon discerned that important matters — especially during the past year — had been conducted in an unsatisfactory manner, we made a careful and critical examination.

The cause of the trouble, we think, was two-fold. First, an inadequate and clumsy system of keeping the stock account; and second, the removal or transfer of the chief clerk of the division. While Mr. Donnelly remained in charge no trouble occurred, on account of his special knowledge and skilful management; but the advent of an inexperienced man presaged the confusion of the past year. When one takes into consideration that the stock kept at the Albany-street yard is not only promiscuous, but so great in quantity as to be worth at the present time considerably over \$100,000, one sees readily that a good system steadily adhered to is indispensable. We have given much thought to this subject, and feel assured that if the methods formulated and explained by us are carried out there will be no more trouble about this matter, or it will certainly be reduced to a minimum. We have confidence in the ability and faithfulness of the new chief clerk and his assistants, and will be surprised if our prophecy is not speedily realized. As to the other matters at issue, we think it is only necessary to state that we have advised changes which will consolidate the accounts, and which will prevent needless repetition of work performed at the general office; thus saving valuable time and causing better service to be rendered. The system of keeping the pay-rolls not only in this division, but throughout the Water Department, we consider well conceived and well executed.

MYSTIC DIVISION.

This division having been recently absorbed by the Eastern Division — and being conducted at present as a branch of it — the conditions being similar, the same methods will apply. The amount of stock to be taken into consideration is comparatively small, amounting at present to about \$4,000 worth. We have made suggestions to the book-keeper in regard to the necessary changes, so that his books will be uniform with those of the Eastern Division, and having entire confidence in him, believe that in a short time he will have things in satisfactory shape.

CHESTNUT HILL.

At Chestnut Hill is the headquarters of the Western Division, and the system of book-keeping there is similar to that used in the other offices of the department, with such variations as are made necessary by some additional requirements. The accounts of the pumping stations are kept there also, and much work in the way of tabulation of statistics is

required by the engineer for comparison and estimation. The amount of detail is considerable, but all clerical work is performed in a manner both conscientious and creditable. We saw little to criticise and much to commend.

In conclusion, we wish to say that we are satisfied that the changes you have personally made in the methods of transacting business, and which you requested us to examine, are all in the direction of increased efficiency, and will bear good results. We also think it only fair to say that, without exception, during this investigation, we have been treated with the utmost courtesy by the clerks of the Water Department, who have been more than willing, at all times, to render us all assistance in their power.

Yours respectfully,

(Signed)

RODNEY McLAUGHLIN AND
ANDREW STEWART,
Examiners of Accounts.

IV.

28 STATE STREET, BOSTON,
May 15, 1897.

HON. JOHN R. MURPHY,

Water Commissioner of the City of Boston :

DEAR SIR, — In compliance with your request I have made recently a survey of the books and accounting affairs of the Boston Water Department, this examination being supplementary to that made at your desire shortly after you became Commissioner. In a city department of such magnitude, with ramifications so numerous and extensive, no complete audit could be accomplished except by one with nothing but that to do. Therefore, my aim has been to see, so far as possible under the circumstances, if the accounting matters of the department were being conducted faithfully and honestly, to ascertain if the improvements suggested a year ago were being carried forward, and to discover the remaining imperfections in the system.

I am pleased to be able to say that I found a decided improvement all along the line, both as to methods pursued and the execution of them. In our report to you of the 27th of February, 1896, we said in regard to the use of money received from charges on account of service pipes, and deposits on account of main pipes, for current expenses, that "the

deposit money should be used for no purpose, whatever, but for the redemption of the receipts outstanding against it." This dangerous abuse, which had continued for years, has been abolished. The fund on the first day of May, 1897, amounted to \$21,913.37, which amount I found to be deposited in bank to the credit of the Water Department. In the past, interest on this fund had not been required of the banks holding it, but now is required, and about \$400 has been received from this source since you made that rule.

A year ago we called attention also to the great increase in the expenditures of money by the department for travelling and miscellaneous matters during the past few years, and by way of comparison I submit the following figures taken from the books :

	Travelling.	Miscellaneous.	Total.
1892-93	\$2,332 08	\$1,077 70	\$3,409 78
1893-94	2,486 54	3,868 81	6,355 35
1894-95	3,988 83	4,300 48	8,289 31
1895-96	2,288 35	4,046 02	6,334 37
1896-97	320 80	2,520 94	2,841 74

We said in our report to you of the 21st of May, 1896, in regard to the Income Division, that "we found the general system of work in this office satisfactory ; but the application of it not altogether so." This criticism could not be made at the present time, for there have been many improvements introduced, which have been intelligently designed, and are being faithfully carried out. For instance, now all applications for service pipes must be filed at the office of the general superintendent, and these applications must be made either by the owners of property or their authorized attorneys. Heretofore contractors, plumbers or any one could make applications, which system resulted in duplicate entries and consequent confusion.

Now all entries of assessments, abatements and rebates are footed up on the ledgers, and carried forward continuously, and may be very easily compared with the figures of the City Collector, and the meter accounts are so arranged that the quarterly accounts committed to the Collector can be quickly examined.

New books have been provided for the recording of necessary data in connection with the elevators and motors in service, and also new records of all fire pipes connected with

the water works, and a book has been opened which gives a summary of assessments, abatements, collections and outstanding balances. These are only some of the excellent improvements which have been made, resulting in placing this division upon a very satisfactory basis.

There is a question inherited from former administrations which, I am convinced, demands speedy settlement. For years it has been customary, if not obligatory, for the Water Department to do considerable work for other city departments, and also for corporations, in the way of laying water pipes and making changes in the locations of pipe lines, etc., the expense of the work performed belonging properly to the corporations and other city departments, whose operations necessitated these changes. Prior to 1894 the cost of such work was charged to the Water Department appropriation, and bills were rendered to the parties for whom the work had been done, and the amounts due having been paid to the City Collector, were credited to the Water Department, but were used for the benefit of the water sinking fund, and were, consequently, valueless thereafter, so far as application to the general work or maintenance of the department was concerned, for which purposes the moneys would have been used had they not been diverted on account of this work done outside the Water Department. Thus the cost of maintaining the department from year to year appeared to be greater than it really was because of these methods. In the year 1894 a large amount of this outside work having been done, particularly for the Park Department, some one whose stock of ingenuity was greater than his knowledge of book-keeping conceived the idea of having the bills for the work done offset by the payment of Water Department pay-rolls by the debtors from time to time to the amount of their obligations. While this scheme has had the desired effect of saving the appropriation from its former losses, it has been the cause of so impairing the accounts of the Water Department that they are absolutely misleading in certain ways. I believe these troubles can be remedied—and remedied they should be without question—by the passage by the City Council each year of an order allowing the moneys received by the city for outside work done by the Water Department to be appropriated and expended for the general uses of that department. I think this would reach the root of all the trouble, having not only the effect of keeping the appropriation intact, but also of making it possible to keep the books so that they shall show the exact transactions of the department. The only other alternative

I can think of would be a refusal to do any work not purely departmental work.

In reviewing the work of the year nothing has pleased me so much as the great reform in the important matter of the keeping of the stock account. In our report to you of May 21, 1896, we said that we found at Albany street "an inadequate and clumsy system of keeping the stock account." The truth of this statement had been completely demonstrated when, at our suggestion, you had an account of stock on hand taken shortly after you became Commissioner. The revelation made by this was almost startling, for while the books called for \$62,529.54 worth of stock, there was found to be on hand \$114,040.89 worth, — a difference of \$51,511.35. We formulated a system for keeping this account, and that it has been faithfully executed is proved by the fact that when account of stock was taken at the close of the fiscal year, \$120,485.81 worth of stock was found to be on hand, while the books called for \$119,912.77 worth, — a difference of only \$573.04. Further comment would be superfluous, I think, in the light of these figures.

Certain improvements ascertained to be essential have been made in the system of meter accounting. The old ways were well enough, so far as they went, but specific information about meters could not be obtained without much trouble and delay. The system has been expanded so as to cover these deficiencies. Take, for instance, the matter of repairs of meters. Meter repairs should be divided into three classes, — repairs in service, in the shops of the department, and in the factories of the makers. No correct nor satisfactory statement of the ultimate cost or the relative merits of meters could be obtained from the meter books, because of the absence of these vital details which could be obtained only by taking these divisions into consideration always. In the future, because of methods recently devised, it will be possible to give at short notice a complete record of every meter which may be owned by the department from the time of its purchase to the time of its condemnation. Furthermore, the correctness of all repair bills rendered by the meter companies will have to be vouched for by the foreman of the meter department, one of whose duties will be to know definitely the details of those repairs.

I notice that there is no "holiday" account kept upon the books, and as I do not think that the money paid on account of holidays should be charged to main pipe laying, or something else of that sort, just the same as if there had been no holidays, I would advise the opening of an account with

holidays on the maintenance book, so that their cost can be shown the same as the cost of anything else.

In the matter of work done for the department by outside teamsters I find improvements have been made which will serve as checks to dishonesty, should any be attempted.

For instance, heretofore, no record was kept of the outside teams employed on work for the department, except whatever memoranda the superintendents in charge kept for their personal use, they having had to vouch — and they alone — for the amount of bills rendered for outside teaming. Instead of this free-and-easy arrangement, it is necessary now for the driver of each team, in every instance, to secure a ticket from the foreman of the job where his team is employed, giving the particulars of the work performed. When the owners of the teams present their bills for payment, these tickets must be presented with the bills as vouchers, and in addition to this, as a further safeguard, the foreman must render a daily report to the department in which is given an account of what he has done, and among the different items of information which he furnishes is a statement of the number of hired teams used, and this also must correspond with the bill rendered. So, should fraudulent practices be attempted, they would be much more certain of quick detection. This is a fair sample of many improvements which have been made here and there, where there were weak spots, which it is not necessary for me to describe in detail. Unnecessary books have been eliminated and necessary books and papers have been added. Accounts have been condensed where practicable, but where greater detail seemed essential they have been amplified without hesitation, for there was too much trusting altogether to the hazard of people's memories heretofore.

Yours very respectfully,

(Signed)

ANDREW STEWART.

V.

25 STATE STREET, BOSTON,
September 10, 1898.

HON. JOHN R. MURPHY,

Water Commissioner of the City of Boston :

DEAR SIR, — In accordance with your desire, I have carefully reviewed the clerical work of the Water Department for the year 1897-98, and have also studied the operation of

the methods introduced by you to promote the efficiency of the book-keeping and general accounting of the department, and have the honor to report as follows:

I found on hand April 1, the amount of money — \$21,135.72 — required by the books for the redemption of the receipts given to people on account of deposits made by them for main and service pipe laying. This fund is not now, and has not been, used during your tenure of office for any purpose but the legitimate one for which it was created.

I said to you in my last report, under date of May 15, 1897, that “I notice that there is no ‘holiday’ account kept upon the books, and as I do not think that the money paid on account of holidays should be charged to main pipe laying, or something else of that sort, just the same as if there had been no holidays, I would advise the opening of an account with holidays on the maintenance book, so that their cost can be shown the same as the cost of anything else.” This has been done as suggested.

I also said in the same report: “There is a question inherited from former administrations which, I am convinced, demands speedy settlement. For years it has been customary, if not obligatory, for the Water Department to do considerable work for other city departments, and also for corporations, in the way of laying water pipes and making changes in the locations of pipe lines, etc., the expense of the work performed belonging properly to the corporations and other city departments, whose operations necessitated these changes. Prior to 1894 the cost of such work was charged to the Water Department appropriation, and bills were rendered to the parties for whom the work had been done, and the amounts due having been paid to the City Collector, were credited to the Water Department, but were used for the benefit of the water sinking fund, and were, consequently, valueless thereafter so far as application to the general work of maintenance of the department was concerned, for which purposes the moneys would have been used had they not been diverted on account of this work done outside the Water Department. Thus the cost of maintaining the department from year to year appeared to be greater than it really was, because of these methods. In the year 1894, a large amount of this outside work having been done, particularly for the Park Department, some one whose stock of ingenuity was greater than his knowledge of book-keeping, conceived the idea of having the bills for the work done offset by the payment of Water Department pay-rolls by the debtors from time to time to the amount of their obliga-

tions. While this scheme has had the desired effect of saving the appropriation from its former losses, it has been the cause of so impairing the accounts of the Water Department that they are absolutely misleading in certain ways." These crude and unsatisfactory practices have been abolished, and the matter is now treated in a straightforward and business-like way.

The general clerical work of the Commissioner's office I found to have been conducted as heretofore in a creditable manner.

At the office of the Distribution Division, formerly the Eastern Division, on Albany street, the accounting affairs have been further systematized, so that now there is order and method and discipline where I found two years and a half ago certain conditions bordering on the chaotic.

The gain noted last year in the keeping of the complicated stock account has been held; and, indeed I saw no sign of any backward step in any direction.

As to the Income Division of the Water Department, I wish to say that the changes and new methods initiated last year have all proved to be practicable and in the line of progress. The gain, though, in the keeping of the meter accounts has been really noteworthy.

On August 28, 1897, the Meter Service was consolidated with the Income Division, thus bringing under the charge of this division all work of setting, repairing, taking out, changing and testing of meters. In order to bring the Meter Service branch of the department to a proper degree of efficiency it was necessary to make a number of changes in the methods of handling the business, a few of which I mention below.

A competent man was placed in full charge of field work, such as applying, changing, repairing in service and taking out of meters, and the same sort of man was placed in full charge of all shop work, provided with the necessary authority and assistance to procure good repair work and accurate tests.

A system of thorough examination of all meters coming into shop, both from factory and from service, was established, also a system of thorough examination, repairing and cleaning of meter registers in shop, thus reclaiming a large number of registers that had been thrown aside.

A system of repairing meter register boxes, glasses and seals and of keeping the same in proper repair was organized, thus insuring meters against improper interference either by persons connected or not connected with the service, and also

a system of checking the readings of meter registers going to or coming from service, thus assuring accuracy in water takers' bills.

The capacity of the shop for repairing, testing and adjusting meters was enlarged, and meters are now repaired in shop at less cost than was involved by the old method of sending them to the factory, and many meters have been reclaimed that had been condemned.

These are illustrations of the improvements made during the past year in the working of the Meter Service, and will convey some idea of the great gain made during that period.

As to the card system of meter accounting, instituted some months ago, I have nothing to say, after a careful inspection of it, but words of commendation. It has already proven itself to be a great advance upon the former method of book accounting.

As an effect of the improved systems, it soon became evident that the hydraulic elevators and motors in use in this city had been running for some years practically unsupervised, with defaced clocks, leaky joints, valves and cylinder heads neglected, and, furthermore, that nothing was being done towards verifying the accuracy of the clocks. Accordingly, during the past year, a complete inspection of all elevators in use in the city was made, and it was found that the elevator cylinders were of varying dimensions and numerous in character and make; that many of the attached clocks were of obsolete patterns, and were located often in inaccessible places, and that the clocks were constantly breaking down by reason of long service and crude repairs, thus causing them to become inoperative. Of these facts no records were formerly kept, and so far as known the owners were never requested to make repairs.

In order that the department might possess positive knowledge of the actual condition of affairs, all data obtained through the above-mentioned inspection was recorded in a book provided for that purpose. The displacement of each elevator cylinder was carefully computed and the registration of the clock compared therewith, and out of some 465 elevator cylinders in the city only four were found to be correct, all others showing either gains or losses to the department. In cases where the registration of a clock was found to be incorrect the owners were requested to have the same adjusted, and all defective clocks have been replaced by new ones, also leaks and defects in mechanism have been remedied, thus preventing waste of water. At present, for the first time in

the history of the Boston Water Department, there is in the possession of the city a complete record of each elevator and the displacement of its cylinder, and all elevator clocks have been adjusted to practical accuracy.

Then, as to fire-pipes, it was found that the records relating to the fire-pipe service of the city were about worthless as records. If any inspection of the numerous systems and their valves and outlets was made, no record was kept of it. There has been established a system of inspection of fire-pipes by which some 5,000 valves and hydrants are regularly inspected and kept sealed and tagged, and something resembling a recognition of the rules of the Water Department by property-holders is now observable. A system of permits for breaking seals on fire-pipes, requiring that no seal be broken without first obtaining a permit, has been adopted, and the department is thus enabled to follow all cases of unsealed valves until they are again resealed.

That so much has been accomplished in so short a space of time is abundant testimony to the willingness and faithfulness of the employees of the Water Department, when properly and intelligently directed. And in this connection I trust that you will permit me to say, what I very much desire to say, that in the two years and a half that I have been going in and out of your department, consulting with you as to its needs and making suggestions as to the improvement of its accounting transactions, I can think of no reform suggested that you have not had executed in its letter and spirit. That the books and accounts of the Water Department are to-day in a condition so admirable is owing solely to your resolution to have them placed upon a businesslike basis, regardless of all difficulties in the way.

Yours respectfully,

(Signed)

ANDREW STEWART,

Examiner of Accounts.

VI.

28 STATE STREET, BOSTON, October 10, 1898.

HON. JOHN R. MURPHY:

DEAR SIR,—As requested by you, I have looked into the matter of dispensing with books relative to the keeping of the meter accounts of the Water Department, at the office of the General Superintendent of the Income Division, and

would say that I think the card system at the Distribution Division on Albany street yields all of the information necessary, and that the keeping of books for this purpose at the office in City Hall would be a work of supererogation. Furthermore, I think it would be well to test the card system fully, and that can be done best by letting it stand alone. Should it prove in any way unequal to what is expected of it, we could then take into consideration the keeping of supplementary books, but my own opinion is that the card system will prove sufficiently elastic to meet any reasonable expectation.

Yours very truly,

(Signed)

ANDREW STEWART.

VII.

28 STATE STREET, BOSTON, April 15, 1899.

HON. JOHN R. MURPHY,

Water Commissioner of the City of Boston:

DEAR SIR,—At your request I have made an examination of the expenditures of the Water Department for the fiscal years 1895-96 to 1898-99, inclusive, the figures for the purpose having been obtained from the reports of the City Auditor and the Water Department reports for the above-mentioned period. I submit to you herewith my finding in the matter:

EXPENDITURES OF THE BOSTON WATER DEPARTMENT.

1895-96 to 1898-99, inclusive.

1895-96.

Current expenses (Auditor's Report, pp. 137, 138)	.	.	\$610,101 70
Extension of Mains, etc. (Auditor's Report, p. 141)	.	.	251,984 94
Additional Supply (Auditor's Report, p. 140)	.	.	382,819 01
Paid on account of work done for corporations, etc.	.	.	\$1,244,905 65
			18,648 71
Total	.	.	\$1,226,256 94

1896-97.

Current expenses (Auditor's Report, p. 151) . . .	\$591,550 42
Extension of Mains, etc. (Auditor's Report, p. 153) . .	232,142 98
Additional Supply (Auditor's Report, p. 153) . . .	217,070 45
	\$1,040,763 85
Paid on account of work done for corporations, etc. (Second Annual Report Water Commissioner, pp. 11-13)	17,366 14
Total	\$1,023,397 71

1897-98.

Current expenses (Auditor's Report, p. 164) . . .	\$623,476 51
Extension of Mains, etc. (Auditor's Report, p. 165) . .	281,782 32
Additional Supply (Auditor's Report, p. 165) . . .	179,879 01
	\$1,085,137 84
Paid on account of work done for corporations, etc. (Third Annual Report Water Commissioner, pp. 13, 14),	13,300 73
Total	\$1,071,837 11

1898-99.

Current Expenses and Extension of Mains — one appro- priation — (Auditor's Exhibit, January 31, 1899, p. 19),	\$808,582 59
From loan of \$200,000, issued November, 1898, for Extension of Mains (Auditor's Exhibit, January 31, 1899, p. 17)	152,601 63
	\$961,184 22
Paid on account of work done for corporations, etc. .	47,798 94
Total	\$913,385 28

The amounts expended during the above years upon portions of the Water Department system now held by the State, estimated as closely as possible, are as follows:

1895-96	\$233,482 98
1896-97	200,608 84
1897-98	168,862 83
1898-99	14,557 91

The amount for the year 1898-99 (\$14,557.91) subtracted from the total amount as stated (\$913,385.28) would leave \$898,827.37 as the net expenditure for that year.

The total amount for the year 1897-98, that is, including the amounts paid on account of portions taken by the State, was \$1,071,837.11, showing a difference of expenditure between the two years of \$173,009.74, caused by the loss to the city of those portions of the department taken by the State.

Yours very truly,

(Signed)

ANDREW STEWART.

VIII.

28 STATE STREET, BOSTON, MASS., May 22, 1899.

HON. JOHN R. MURPHY,

Water Commissioner of the City of Boston:

DEAR SIR,—In accordance with your desire, I made during the past weeks a survey of the accounting affairs of the Water Department for the fiscal year 1898-99, and herewith submit to you my report of the same.

I found on hand the amount of money — \$18,114.74 — required by the books for the redemption of the receipts given to people on account of deposits made by them for main and service-pipe laying.

This fund is not now, and has not been, used during your tenure of office for any purpose but the legitimate one for which it was created.

The general clerical work of the Commissioner's office I found to have been conducted as heretofore in a creditable manner.

At the office of the Distribution Division on Albany street the accounting affairs have been still further systematized, and the business of the division is being conducted in a very orderly and methodical manner, all of the improvements which I noted in my report to you last year having been held and many others having been consummated, some of which, as follows, are worthy of specification.

The system of accounting for the expenditure of the yearly appropriations in vogue heretofore, consisted in charging the money expended in labor and stock to one or more of the many subdivisions into which the work of the department is classified. These subdivisions were not specific enough to give one a comprehensive idea of the cost of certain kinds of work; for instance, the main pipe work was formerly separated into three subdivisions, viz., Extension, Relaying and Repairs. Originally the term "relaying" was intended to cover the work of renewing mains worn out in service, but for want of a broader term it became the custom to charge under this heading, not only the work of renewing the old mains worn out in service, but also the replacing of mains insufficient to supply the demand made upon them by those of a larger diameter, relocating mains in the way of some public improvement, and raising or lowering mains to conform with new grades. Now these different kinds of work are provided for under the heading "Changes, Renewals and

Improvements," which give opportunity for proper and correct analysis.

Furthermore, the term "extension" now represents upon the books of the department what it was meant to represent, namely, the linear extension of the system, and not in any way the diametrical extension.

All kinds of hydrant work were formerly designated by the title "Hydrant Repairs;" now this work is classified under the headings "New Hydrants," "Changes in Style and Location" and "Repairs." When water was delivered through hydrants to contractors the labor was charged wrongly, for want of a proper subdivision, to "Hydrant Repairs." The labor should have been charged to the "Collection of Water Revenue," and that is what is being done now.

Service-pipe work was formerly divided into two classes, viz., "New Services" and "Service-Pipe Repairs," and a most important element of service-pipe work, namely, the changing of size and location, was not accounted for separately, but was included in one or the other of these two subdivisions. A subdivision covering this sort of work is now provided.

Work done on water-posts was formerly charged under "New Services" or "Service-Pipe Repairs." It is now accounted for in a class by itself, and the considerable amount of work done on this order of fixture is properly exhibited.

The accounts necessary because of fountains were imperfect, for the indefinite term "Fountain Repairs" had to cover everything. Now the divisions comprise "New Fountains," "Changes in Style and Location," "Furnishing Ice for Fountains" and "Fountain Repairs."

As to the expenditures of the department on account of holidays, sickness, etc., much has been accomplished in the right direction.

Each foreman is now supplied with a time-book containing all the subdivisions, so arranged as to allow of his charging the smallest fraction of a day to any particular kind of work. Formerly, outside of the Yard, nothing but a plain time-book was used, showing only whether a man worked or not, and giving no idea as to the kind of work on which he was employed.

Overtime was formerly given to men on their simple statement that they had worked so many hours overtime, said statement, of course, approved by some one in authority, who must have depended upon his memory largely as to the correctness of the same. Now, before payment, the charges are checked with a report of the work done, and must correspond

with the labor on the report. This method not only checks the overtime, but also insures a correct report, that is as far as the labor is concerned. It was not uncommon heretofore to have the overtime paid omitted from the report of the work, and if the work was chargeable the charge, based upon the report, was, as a matter of course, insufficient, and the department was underpaid for its work.

As to the stock accounts, which in the past were the prolific cause of untold annoyance and anxiety, the gain noted last year has been more than held.

Heretofore the teamsters were not obliged to show a receipt for the stock which they took from the Yard. Now they are given a blank receipt, which must be returned signed by the foreman in charge of the work for which the stock is intended, which certifies to the receipt of the stock. The time that the teamster leaves the Yard is noted by the Yardmaster on the blank. The time that he arrives with the stock where the work is being done, and the time he leaves there to return to the Yard, is noted by the foreman of the job, and the time he finally arrives in the Yard is noted by the Yardmaster, thus giving a correct record of his movements and showing the total amount of time consumed in delivering the goods, thus making it easy to discover any attempt on the part of the teamster to kill time.

Those in charge of the outlying yards have been given receiving and delivery books in which they are to record the receipt and delivery of *everything* going in or out of their yards. This makes it possible to check the statement of "stock used" on their reports of work done. A special stock account with each of the outlying yards and the "service-pipe gang" is being kept, and at the end of the year it will be possible to tell just how much stock on hand each should have.

Heretofore the work of the carpenter and machine shops was reported in a rather general way, which gave no idea of the cost of any particular job. Now the almost innumerable jobs, varying in magnitude from the construction of a building complete to the sharpening of a knife or the driving of a nail, is reported in detail, showing the exact cost of each. This, of course, entails considerable work and greatly increases the amount of record matter.

Up to the present year the records of the different kinds of work performed by the department were crowded into about five books, and to one unacquainted with these books it was a difficult matter to find the details of work done. During the past year the records have been classified and books made

that are adapted in every particular to each class of work. This elaborate system was formulated as a result of a thorough investigation and progressive treatment of the requirements of the department.

I think it nothing but just to say here that for the good work accomplished in the Distribution Division, as stated, the Chief Clerk and his assistants are deserving of great credit, for without their earnest and intelligent diligence and faithfulness but a very small part of the things done in such a short time could have been done.

As to the Income Division, including the Meter Service Division of the Water Department, I found that the improvements in methods and systems noted in my report to you of 10th of last September had all been adhered to and are proving satisfactory.

Yours very truly,

(Signed)

ANDREW STEWART.

Examiner of Accounts.

APPENDIX B.

REPORT OF THE INCOME DIVISION.

CITY HALL, BOSTON, February 1, 1899.

HON. JOHN R. MURPHY,

Water Commissioner :

SIR,— Herewith please find annual report of the Income Division, Water Department. The reports of the Meter Service and the Deacon Service cover the financial year ending January 31, 1899; the balance of the report is rendered for the calendar year ending December 31, 1898, it being impracticable, owing to the nature of the accounts, to render an entire report for the financial year.

The contracts to supply water to the cities of Chelsea, Somerville and Everett were annulled by the Metropolitan Water Act on January 1, 1898, which fact necessarily reduces the grand totals representing the work performed by the Income Division, as compared with former years.

Respectfully submitted,

J. H. CALDWELL,

General Superintendent Income Division.

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Table I.*Showing Number of Water-takers during 1898.*

	Number.
Water-takers by annual rates	99,835
Water-takers by meter rates	5,650
Total number of takers	105,485

Table II.*Showing Kind and Number of Fixtures in use January 31, 1899.*

	Number.
Bath-tubs	65,391
Bowls	103,754
Foot-tubs	356
Sinks	170,087
Taps	25,438
Urinal, automatic	5,001
“ otherwise	586
Wash-tubs	100,598
Water-closets	146,510
Total fixtures	617,721

Table III.
Water by Annual Rates.

STYLE OF PREMISES.	Number of Premises.	Amounts Assessed.
Armories.....	4	\$152 00
Bakeries.....	273	3,617 42
Bath-houses.....	5	191 50
Building purposes.....	1,210	11,750 03
Cemeteries.....	12	160 00
Churches.....	245	2,868 33
Clubs.....	162	2,316 79
Depots.....	46	913 51
Disinfectant.....	1	25 00
Dwelling-houses.....	54,829	791,941 40
Fire Department:		
Chemical engines.....	12	180 00
Combination wagons.....	6	83 33
Hydrants and reservoirs.....	7,066	105,990 00
Ladder companies.....	17	255 00
Steam fire-engines.....	43	1,075 00
Hose companies.....	1	15 00
Water towers.....	1	15 00
Filling tanks (special).....	2	212 37
Flooding rinks.....	2	65 86
Fountains.....	33	555 08
Freight-houses.....	15	143 50
Green-houses.....	67	1,201 50
Gymnasiums.....	2	544 00
Halls.....	142	2,128 12
Hand-hose.....	8,680	43,400 00
Hospitals.....	58	4,210 00
Hotels.....	5	596 00
Laundries.....	578	10,713 42
Libraries and museums.....	1	10 00
Manufactories.....	15	425 86
Model houses.....	9,467	200,584 79
Morgue.....	1	10 00
Motors.....	10	110 00
Offal stations.....	2	225 00
Offices.....	1,621	14,516 16
Photograph rooms.....	37	720 11
Police stations.....	7	130 00
Public buildings.....	9	408 00
Public institutions.....	5	8,682 00
Puddling trenches.....	41	754 33
Restaurants and lunches.....	490	7,815 73
Saloons.....	572	21,286 20
Schools.....	131	1,882 50
Sewers (building), account 1897.....	1	1,780 38
Sewers (building), account 1898.....	1	5,196 18
Sewers (flushing).....	1	500 00
Shops.....	3,042	26,223 57
Shipping.....	33	1,525 47
Stables.....	4,021	27,959 72
Steam-engines.....	161	5,145 01
Steam-rollers.....	6	150 00
Steam-crushers.....	5	125 00
Stores.....	6,590	65,648 45
Theatres (special).....	5	204 12
Urinals (public).....	15	545 00
<i>Carried forward</i>	99,807	\$1,377,882 74

Table III. — *Concluded.*

STYLE OF PREMISES.	Number of Premises.	Amounts Assessed.
<i>Brought forward</i>	99,807	\$1,377,882 74
Ward-rooms.....	9	90 00
Washing-carts.....	3	100 00
Watering streets.....	16	50,879 89
Totals	99,835	\$1,428,952 63

Table IV.

Water by Meter Rates.

STYLE OF PREMISES.	Number of Premises.	Quantity of Water Consumed. Cubic Feet.	Amount Assessed.
Bakeries.....	17	1,371,000	\$1,782 20
Bath-houses.....	17	2,306,000	2,932 50
Boarding-houses.....	67	4,193,000	5,386 60
Bottling.....	55	4,302,000	5,270 70
Breweries.....	29	30,618,000	37,714 10
Cemeteries.....	1	312,000	398 60
Chemicals.....	9	1,371,000	1,742 60
Club-houses.....	28	5,016,000	6,356 60
Chutes.....	1	638,000	789 60
Distilleries.....	5	1,055,000	1,331 80
Electrical companies.....	18	24,013,000	29,798 05
Elevators and motors.....	515	52,002,000	66,965 71
Factories.....	241	52,105,000	57,497 55
Fish-houses.....	28	1,528,000	2,056 20
Gasworks.....	14	13,384,000	14,331 20
Greenhouses.....	11	701,000	973 90
Halls.....	17	2,269,000	2,873 70
Hospitals.....	12	11,871,000	13,761 70
Hotels.....	122	56,189,000	69,620 60
Iron-works.....	47	7,249,000	9,370 00
Laundries.....	26	7,674,000	9,977 80
Markets.....	5	249,000	367 10
Mills and engines.....	76	10,652,000	16,092 60
Model houses.....	1,045	68,953,000	89,815 26
Navy Yard and barracks.....	4	6,115,000	6,729 00
Offices, stores and shops.....	1,263	117,474,000	152,879 20
Oil-works.....	8	641,000	840 90
Parks.....	11	2,037,000	2,590 60
Police stations.....	16	1,820,000	2,491 80
Public institutions.....	29	21,120,000	25,861 40
Saloons and restaurants.....	331	26,081,000	34,685 90
Schools.....	150	14,232,000	20,307 70
Slaughtering houses.....	4	1,610,000	2,031 70
Stables.....	343	15,255,000	21,263 96
Steam and street R.R. companies.....	71	139,048,000	131,113 90
Stone-works.....	6	1,285,000	1,598 50
Sugar refineries.....	1	25,571,000	22,080 80
Tanneries.....	3	265,000	356 00
Theatres.....	14	2,856,000	3,649 40
Warehouses.....	14	2,507,000	3,279 20
Wharves and shipping.....	76	26,959,000	33,694 70
Totals.....	4,750	764,898,000	\$912,667 33

Table V.
Number and Amounts of Abatements Allowed during the Year 1898.

ON ACCOUNT OF ASSESS- MENTS FOR YEAR.	COCHITUATE.		MYSTIC.							
	Boston, excluding Charlestown.*		Charlestown.		Chelsea.		Somerville.		Everett.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
1898.....	3,283	\$22,102 64								
1897.....	1,973	18,837 40	101	\$912 15	157	\$1,201 40	475	\$2,855 87	247	\$1,428 25
1896.....	3	213 20	2	15 00	3	15 00	4	18 00	2	23 20
1895.....	215	1,169 24	1	5 00	1	5 00				

Total Cochituate.....\$42,322 48.

Total Mystic.....\$6,478 87.

* Abatements on account of 1898, in this column, include Charlestown, the Mystic water contracts having been abrogated January 1, 1898, by the Metropolitan Water Act.

The abatements allowed on account of 1898 assessments, amounting to \$22,102.64, were due to changes in occupancy of premises, changes in ownership, vacancies, errors in valuations and assessments, inaccuracy of meters as proved by tests, underground leaks for which the owner could not be held entirely responsible, and for other reasons, which, in the judgment of the General Superintendent, entitled the water-taker to consideration.

The abatements on account of 1897, 1896 and 1895, were due to bills uncollectible, changes of ownership, failures, shut-off for non-payment and cleaning up old accounts.

Table VI.*New Elevator, Motor, Fire and Service Pipes.*

Elevator pipes.....	19
Motor pipes.....	8
Fire pipes.....	29
Service pipes.....	2,038
Total	2,094

Table VII.*Turning Water Off and On.*

For repairs in mains.....	1,207
“ “ “ services.....	3,827
“ non-payment of water bills	3,307
“ waste.....	21
Turning on first time	1,804
Vacancies.....	3,587
Total	13,753

Table VIII.*Off and On Receipts.*

Received for turning water off and on for repairs, deposited with City Collector.....	\$1,842 00
--	------------

Table IX.

ELEVATOR, MOTOR AND FIRE PIPE SERVICE, FOR YEAR ENDING
DECEMBER 31, 1898.

Elevators.

Total number of hydraulic elevators in service December 31, 1898	505
Elevators in service operated by steam or electricity	37
Total number of elevators under supervision of Water Department, December 31, 1898	542
New elevators inspected, measured and accepted	23
Elevators changed from water to electric power	19
Elevators discontinued, owing to buildings being demolished	6
Elevators discontinued, owing to vacancies	44
Elevator cylinders measured and clock compared	199
" clocks readjusted to accuracy	133
" clocks and cords repaired	54
Elevator clocks specially inspected after realterations	80
Elevator cylinders exchanged for other makes	3
Elevator cylinders or valves found leaking and repaired	23

Motors.

Total number of hydraulic motors in service	113
New motors applied to service during 1898	5
Motor clocks repaired	3

Fire Pipes.

Buildings equipped with fire-pipe service	408
Visits made to premises	954
Fire outlet valves inspected	4,004
Fire outlet valves sealed and resealed	2,375
Hydrants inspected	126
Hydrants resealed	51

METER SERVICE.

Realizing that the condition of the meters in service is a matter of vital importance, both to the department and to the water-taker, a great amount of careful work has been done by the Meter Service during the past year. The amount of work performed upon meters is much increased over former

years, which fact is not shown by a greater number of operations, but rather by the quantity and quality of the work performed upon each meter undergoing repairs at the Department shop being greatly increased and improved. Meters, when prepared for service are much more accurate than formerly, and their condition is such that they will not need repairs nor adjustment for years, barring unpreventable accidents.

The effect of the present methods of examinations, tests and repairs is already apparent, and will increase as the present system embraces all the meters in service, and the efficiency and accuracy of meters in service will then be advanced to a degree which has heretofore been deemed unattainable.

The work of the Meter service is set forth in the following tables:

Table X.

Statement of Meters for Year ending January 31, 1899.

Meters belonging to department, January 31, 1898 .	5,300
Purchased during year	25
In stock, not reported last year	8
	5,333
Condemned during year	33
Lost in service during year	5
Sold	17
	55
Meters belonging to department, January 31, 1899,	<u><u>5,278</u></u>

Table XI.

Distribution of Meters, January 31, 1899.

In service	4,752
At department shop	31
At factory for repairs	495
	<u><u>5,278</u></u>

Table XII.

*General Statement of Work Performed on Meters during Year ending
January 31, 1899.*

	Meters.	Boxes.
Applied.....	411	90
Discontinued	593	
Changed.....	1,176	
Changed locations	31	
Tested	3,160	
Repaired at shop	1,095	
" " factory	462	
" in service.....	1,442	167
Abandoned.....		33
Examined	541	
Hayed boxes.....		1,429
Lost in service.....	5	
Sold.....	17	
Condemned.....	33	
Meters at factory	31	
" in service	4,752	
Purchased	25	
Meters at department shop	495	
" in stock, not reported last year	8	
Private meters applied to department service	18	
" " in department service.....	71	

Table XIII.

Meters Condemned.

	DIAMETER IN INCHES.						Totals.
	3	2	1½	1	¾	½	
Worthington.....	1	5	1	13	6	2	28
Metropolitan ...					2		2
Crown						1	1
B. W. W.					2		2
Totals.....	1	5	1	13	10	3	33

Table XIV.*Meters Applied.*

	DIAMETER IN INCHES.							Totals.
	4	3	2	1½	1	¾	⅝	
Worthington	5	1	7	13	30	24	.....	80
Crown.....	10	8	9	13	33	36	133	242
Metropolitan.....	.....	.....	.....	2	7	36	.....	45
Hersey .....	.....	.....	3	6	6	7	.....	22
Thomson.....	.....	.....	.....	.....	.....	3	3	6
B. W. W.....	.....	.....	.....	.....	.....	4	.....	4
Lambert .....	.....	.....	.....	1	2	2	4	9
Gem.....	1	.....	.....	.....	.....	.....	.....	1
Nash .....	.....	.....	.....	.....	.....	2	.....	2
Totals	16	9	19	35	78	114	140	411

Table XV.*Private Meters Applied to Department Service.*

	DIAMETER IN INCHES.						Totals.
	6	2	1½	1	¾	⅝	
Worthington.....	.....	.....	.....	1	.....	1	2
Crown	1	4	6	.....	1	.....	12
Hersey.....	.....	.....	1	.....	.....	.....	1
Lambert .....	.....	1	.....	.....	.....	.....	1
Gem	2	.....	.....	.....	.....	.....	2
Totals.....	3	5	7	1	1	1	18

Table XVI.*Meters Discontinued.*

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Worthington.....		5	6	31	14	81	52	.....	189
Crown	1	9	12	14	14	43	54	124	262
Metropolitan.....					2	22	66	.....	90
Hersey.....			4	6	8	9	13	1	41
B. W. W.....							5	.....	5
Gem		3							3
Ball & Fitts.....			1	1					2
Lambert								1	1
Totals.....	1	17	23	52	38	146	190	126	593

Table XVII.*Meters Purchased.*

	DIAMETER IN INCHES.							Totals
	4	3	2	1½	1	¾	⅝	
Hersey	1	1						2
Lambert.....			2	3	2	4	2	13
Nash.....					2	2		4
Empire					2			2
Trident.....					2			2
Disc					2			2
Totals.....	1	1	2	3	10	6	2	25

Table XVIII.*Meters Sold.*

	DIAMETER IN INCHES.					Totals.
	2	1½	1	¾	⅝	
Thompson	2	3	2	4	2	13
Crown	1				2	3
Worthington.....			1			1
Totals.....	3	3	3	4	4	17

Table XIX.
Meters Repaired at Factory.

	DIAMETER IN INCHES.							Totals.
	4	3	2	1½	1	¾	⅝	
Worthington		1	8	3	25	1	.....	38
Crown	3	1	5	4	12	22	97	144
Hersey		2	.....	5	5	7	.....	19
Metropolitan				3	43	213	1	260
Ball & Fitts		1	.....	.....	.....	.....	.....	1
Totals	3	5	13	15	85	243	98	462

Table XX.
Meters Repaired in Service.

CAUSE OF REPAIRS.	Totals.
Cap broken	734
Glass broken	266
Leak at spindle	177
“ “ stop-cock	7
“ “ coupling	48
“ “ body	3
“ on pipe	5
Bolts loose	3
Spindle stuck	3
“ broken	12
Hands stuck	7
Retapped for cap screws	2
Clock defaced	34
Cover loose	2
Pawl stuck	2
Not registering	6
Hands loose	3
Gears loose	5
Hands broken	76
Counter-box loose	1
Clock condemned	14
“ pin broken	4
“ loose	4
Hands untrue	2
Piston stuck	2
Ratchet out of order	5
<i>Carried forward</i>	1,427

Table XX.—Concluded.

CAUSE OF REPAIRS.	Totals.
<i>Brought forward</i>	1,427
Meter insecure.....	5
Set backwards.....	2
Clock train broken.....	2
Lever stuck.....	2
Fish in meter.....	3
Intermittent.....	1
Total.....	1,442

Table XXI.
Meters Changed.

CAUSE.	Totals.	CAUSE.	Totals.
For test.....	397	<i>Brought forward</i>	925
Not registering (cause unknown).....	70	Hands broken.....	52
No force (cause unknown).....	39	Piston rod short.....	3
Leak at body.....	19	Piston rod bent.....	1
Leak at spindle.....	22	Hands stuck.....	12
Spindle broken.....	34	Clock broken.....	21
Ratchet broken.....	7	Cap broken.....	85
Glass broken.....	22	Location changed.....	11
Rust.....	63	Pawl detached.....	2
Enlargement.....	36	Gravel.....	10
Gears loose.....	10	Fish.....	8
Frost.....	21	Cylinder dented.....	1
Heat.....	20	Plate broken.....	4
Stoppage (cause unknown).....	21	Clock defaced.....	10
Gears did not mesh.....	17	Screws loose.....	3
Intermediate train worn.....	53	Leak at connections.....	4
Intermediate train broken.....	34	Pawl stuck.....	4
Piston stuck.....	16	Valves worn.....	1
Clock train broken.....	3	Gear lost.....	1
Lever broken.....	6	Set backwards.....	4
Piston broken.....	2	Clock detached.....	2
Intermediate shaft broken.....	3	Cylinder points broken.....	1
Gasket.....	1	Service reduced.....	2
Solder.....	4	Intermediate train stuck.....	5
Rods broken.....	2	Pawl worn.....	1
Lever detached.....	3	Applied counter extension.....	3
<i>Carried forward</i>	925	Total.....	1,176

Table XXII.*Meters in Service January 31, 1899.*

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Worthington.....	2	20	30	136	124	585	404	4	1,305
Crown.....	7	44	52	81	157	370	461	1,247	2,419
Hersey.....		5	11	19	39	78	176	16	344
Metropolitan.....				4	15	102	484	1	606
Thomson.....							1	8	9
B. W. W.....							36		36
Gem.....	1	3							4
Champion.....							1		1
Torrent.....	1								1
Lambert.....				2	3	2	3	4	14
Empire.....						1	2		3
Nash.....						2	2	2	6
Disc.....						2			2
Trident.....						2			2
Totals.....	11	72	93	242	338	1,144	1,570	1,282	4,752

Table XXIII.*Private Meters in Department Service, January, 31, 1899.*

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Worthington.....			1	4	2	6	1	5	19
Crown.....	1	3	2	4	12	5	2	12	41
Hersey.....			1	1	3				5
Thomson.....					1				1
B. W. W.....							1		1
Ball & Fitts.....				1					1
Gem.....	2								2
Lambert.....				1					1
Totals.....	3	3	4	11	18	11	4	17	71

Table XXIV.*Meters at Factory for Repairs, January 31, 1899.*

	DIAMETER IN INCHES.						Totals.
	3	2	1½	1	¾	⅝	
Crown		1	1	.....	4	14	20
Worthington	1	.....	.....	7	2	.....	10
Hersey				1	.....		1
Totals	1	1	1	8	6	14	31

Table XXV.*Meters at Department Shop, January 31, 1899.*

	DIAMETER IN INCHES.								Totals.
	6	4	3	2	1½	1	¾	⅝	
Worthington.....		4	3	25	4	37	54	2	129
Crown		2	3	5	5	8	12	78	113
Hersey		1	2	4	3	1	8	2	21
Metropolitan.....					5	30	154	2	191
B. W. W.....							4	.....	4
Thomson.....							1	1	2
Ball & Fitts.....			1	1	.....		4	2	8
Gem.....	1	1	4	2	.....				8
Empire.....						1	.....		1
Undine.....							1	4	5
Desper								2	2
Tremont						1		1	2
Spooner								1	1
Balance valve.....								1	1
Equitable							1	.....	1
Beck & Co.								1	1
Duplex.....						1	.....		1
Niagara								1	1
(Star on end) no name								1	1
Proportional.....							1	.....	1
Smith						1	.....		1
Totals	1	8	13	37	17	80	240	99	495

DEACON SERVICE.

The Deacon Meter Service was transferred from the Distribution Division to the Income Division on December 9, 1898; the following report, however, covers the work of the entire year, ending January 31, 1899.

The Deacon meters were placed in operation for the year on March 30, 1898, and their work ceased November 28, 1898. During this period 63 meters were operated, from which 717 diagrams were obtained, being 349 readings of 24 hours each and 368 night tests, giving the results of readings and tests of 152 sections. These diagrams were delivered to the City Engineer for compilation.

The Deacon meters in Charlestown could not be operated, on account of the high service having so many dead ends that it was impossible to work a section without interfering with the water supply of surrounding streets.

A second operation of the meters in South Boston could not be made, owing to the delay in the changing of pipes and connections from the Cochituate to the Metropolitan supply.

The construction of Columbia road prevented the use of the Columbia street and Boston street meters early in the year, hence second readings in Dorchester meters could not be obtained.

The work of the inspection corps in detecting waste was confined to sections of the city where the meters had indicated excessive waste of water, excepting during the months of December, 1898, and January, 1899, when the men were working in sections of the city where the meters could not be operated.

The following tables cover the work of the Deacon service for the year:

Table XXVI.

Waste Inspection.

	NUMBER.
Houses inspected	54,007
Waste reports made	11,051
Re-examinations	13,779

Table XXVII.*Waste Re-examination Previous to Repairs.*

	NUMBER.
Not repaired from 1897 inspection.....	687
Re-examined once and repaired.....	8,588
" twice " " 	1,299
" three times and repaired.....	310
" four " " " 	125
" five " " " 	63
" six " " " 	21
" seven " " " 	5

Table XXVIII.*Defective Fixtures and Waste.*

	NUMBER.
Tank fixtures leaking.....	7,110
Faucets leaking.....	4,655
Closets ".....	1,080
Pipes burst.....	413
Wilful waste cases.....	164

APPENDIX C.

REPORT OF THE DISTRIBUTION DIVISION.

OFFICE OF THE GENERAL SUPERINTENDENT,
710 ALBANY STREET, February 1, 1899.

HON. JOHN R. MURPHY,

Water Commissioner:

I herewith submit the annual report of the Distribution Division for the year ending January 31, 1899.

MAIN PIPE.

There were laid during the year 33.6 miles of main pipe. This amount includes 3,220 feet of private mains laid for various parties, 3,273 feet of hydrant, blow-off, and reservoir pipe, 44 feet of Deacon meter pipe, and 1,806 feet of main pipe lowered, raised, and moved laterally, which do not affect the length of the distribution system.

Nine and one-tenth miles of pipe were abandoned, making the total length of our distribution system 689.2 miles.

Of the 33.6 miles laid, 8 miles were relaid.

The 30-inch high service main for the Dorchester District was continued from the point in Geneva avenue, near Blue Hill avenue, where we stopped last year, through Geneva avenue, Bowdoin and Washington streets, to a point in Washington street, near Bowdoin street, and there capped. During the coming year it will be extended further in a southerly direction, thus giving a much better service throughout the Dorchester District. The small portion of this line at the junction of Columbus avenue and Centre street, referred to in last year's report as not being laid, was laid during the early part of the past year, and gave the Elm Hill District a direct supply that allowed the abandonment of the Wayne-street Pumping Station.

In Columbia road, from Blue Hill avenue to Edward Everett square, 24-inch, 20-inch, 16-inch, 12-inch and 6-inch lines have been laid, which will give, when connected, to this

boulevard and the territory adjacent to and connected by, a most sufficient supply.

The West Roxbury high service was extended by a 24-inch line from the Forest Hills Station, through South street, to the Arnold Arboretum, and there connected to a piece previously laid. The line was then carried through Walter and South streets to Roberts street and there temporarily ended. Connections were made at the junction of Walter and Weld streets and at the junction of South and Roberts streets, thereby permitting the substitution of the Fisher Hill high service for the tank service on Skinner Hill. At the present writing we are engaged in extending this 24-inch line to give to the district an ample supply.

A 16-inch main was taken off the above mentioned 24-inch main and laid in Roberts street as far as Corinth street and there temporarily capped. This is to supplement the supply of the eastern portion of West Roxbury.

A 16-inch line was laid from Ashmont street at Train street, through Ashmont street to Neponset avenue, and there reduced to 12 inches and continued through Neponset avenue, across the bridge, through Hancock street, Quincy, to Atlantic street, through Atlantic and Squantum streets to Beach road, through Beach road to Moon Island road, and through Moon Island road to the sea-wall on Moon Island, opposite Long Island, where at some later date it will be continued under water to Long Island. This line will give to the various islands in the harbor a much needed supply for fire protection and domestic use.

A 12-inch main was laid in Mt. Vernon street, West Roxbury, from Temple to Baker streets, giving an additional feed to that extreme portion of West Roxbury and reinforcing the service in that section that was previously wholly dependent upon Centre street for its supply.

A 20-inch line has been laid in Third street, between Dorchester street and Q street. This is a great step towards the completion of a connecting loop in the low service supplies of South Boston and Dorchester.

The 8-inch low service main in Summer-street extension was relaid with 12-inch and extended from its former end at Gilbert place to Dorchester avenue, and in that street for a distance of about 1,500 feet towards the bridge. The 8-inch high service main in Summer-street extension was relaid with 12-inch and extended from its former end at Gilbert place with 10-inch pipe to Dorchester avenue, and in that street for a distance of about 1,400 feet towards the bridge. A 12-inch private line was laid across the yard of the new

terminal and connects the above mentioned 12-inch low service in Dorchester avenue with the 16-inch low service in Atlantic avenue.

About 680 feet of 12-inch salt water main was laid in Central Wharf, from Atlantic avenue to the water front.

Prominent in the relaying work performed during the year was that in Shawmut avenue, where the 6-inch main was relaid with 12-inch from Newton street to Massachusetts avenue, and with 16-inch from Massachusetts avenue to Vernon street; in Guild street, Roxbury, where the 4-inch main was replaced by a 12-inch; and in Heath street, Parker street, Bromley Park, Wensley street and Bickford avenue, where the old mains have been relaid with larger ones. All this work considerably increases the efficiency of the fire service in the vicinity of these streets.

A great deal of complicated work was carried on in the West Roxbury District, where, on account of the abolition of grade crossings along the line of the N.Y., N.H. & H. R.R., our system had to be adjusted to the new conditions.

In Sterling, Weston, and Newbern streets, Roxbury, about 900 feet of old Jamaica pond aqueduct pipe was abandoned and replaced with larger sized modern pipe. We hope in the near future to remove the remainder of this objectionable system.

Where desirable and practicable, dead ends were abolished by connecting, thus giving better circulation and preventing pollution of the water at those points.

Unusual precautions have been taken against freezing in mains laid in exposed places, principally on bridges.

In Francis street, Brookline avenue, and Washington street, near Arnold street, we found blow-offs that were not connected with the sewer, but opened into private property, thus exposing the same to damage. This dangerous and useless arrangement constructed in former years has been remedied in these instances, and we are now investigating similar defects at other points.

During the year 2,503 feet of abandoned 12-inch pipe were taken from the ground and being in good condition have been utilized again in place of new pipe. This resulted in a saving to the department.

GATES OR STOP-COCKS.

Six hundred and sixteen gates were established and 173 abandoned; of the former 16 were "blow-off" and 23 were private gates, and of the latter 4 were "blow-off" gates.

This makes the total number of gates in use, exclusive of "blow-off" and private gates, 8,339. The gates have been thoroughly looked after, as will be seen by reference to our statement of miscellaneous work performed, wherein it is stated that 16,250 gate inspections have been made, 8,791 locations of gates marked and remarked, 219 gates oiled and cleaned in service, 7,220 salt deposits made on gate covers to prevent freezing, 824 boxes repaired in service, and 291 boxes renewed in service. During the coming year the covers to all gates will be so marked as to show at a glance whether or not the gate is a division gate, or if it controls a main, service, fire, motor, or elevator pipe. In some sections of the city there is a complex arrangement of pipes and gates, and in order to facilitate a correct operation of the same they are to be numbered on the box covers correspondingly to numbers of the same gates represented on plans in our office. Thus by consulting the plans one can get the numbers of the gates to be operated in order to achieve certain desired results and when upon the ground he can by simply referring to the numbers on the covers locate these gates and carry out his purpose with no delay and considerable certainty. We have already numbered in this way the gates at Roxbury Crossing.

AIR-COCKS.

During the year 17 air-cocks were established and two abandoned in various parts of the city.

BLOW-OFF COCKS.

Ten of various sizes were established and one abandoned.

DEACON METERS.

One was established at Long Island; one was abandoned at Castle street, corner of Tremont street, and one was abandoned at Columbia road, corner of Sayward street.

HYDRANTS.

Five hundred and thirty-three hydrants were established and 388 abandoned. Of the number established, 12 were salt-water hydrants and have no connection with our system. The total number of hydrants connected with our system up to date is 7,368. During the year we abandoned 150 Boston hydrants, and in almost every case replaced them with either Lowry's or Post's. This is a distinct gain to the fire service of the city, as the Boston hydrant is of insufficient

capacity, and very rarely used by the Fire Department. The usual attention was given the hydrants during the year. A glance at our schedule of miscellaneous work performed will show that 150,000 hydrant inspections were made during cold weather and 7,014 repairs of a miscellaneous character made on the hydrants. Three thousand one hundred and thirty-three bags of salt were purchased by this department and delivered to the Fire Department, to be used on hydrant covers during the cold weather.

WATER POSTS.

During the year sixty water posts were established and thirteen abandoned, making a total now in use of 455. This surpasses all previous records of the number established and abandoned in one year. The customary attention was given to their proper maintenance.

FOUNTAINS.

Nineteen drinking fountains were established and eight abandoned. The total number in use is 96. A table giving the number, style, and location of each is attached. Of the number established 10 were cold water fountains. We also fitted two ordinary fountains with cold water attachments.

In connection with the cold water fountains we cut and stored, for use during the coming summer, about 1,700 tons of ice in Brookline and East Boston Reservoirs.

SERVICE PIPES.

Two thousand three hundred and sixty-six service pipes (52,866 feet) have been laid during the year, and 263 (7,006 feet) abandoned, showing a net increase of 2,103 service pipes (45,859 feet) for the year, and making the total number of pipes now in use 84,129, with a length of 2,343,425 feet.

Under the law governing the laying out of new streets, we were obliged to lay to vacant lots 589 service pipes, from which no revenue is at present derived.

It has frequently happened that in laying mains in private ways or in streets that were formerly private ways, we have met with service pipes laid irregularly, *i.e.*, from a point not directly opposite the premises they supply, and when it was practicable to do so we relaid them in a regular manner free of charge. We shall continue to do this in all similar cases.

SHOPS.

The following statement will show the amount of work performed by the different shops during the year :

Machine Shop — Manufactures.

Gates of various sizes (mostly large sizes)	467
Cocks of various sizes	4,693
Nipples of various sizes	1,001
Coupling nuts, various sizes	8,984
Coupling tubes, various sizes	9,506
Male couplings, various sizes	1,568
Plugs, various sizes	485
Air-cocks, various sizes	12
Hydrants, various styles	374
Hydrant wastes, large	452
Hydrant wastes, small	30
Set screws	1,792
Hydrant bolts	2,761
Sidewalk tops	1,504
Jointers, various sizes	46
Puddling heads	19
Thimbles, various sizes	67
Lowry hydrant chucks	2
Lamp-post nuts	33

Repairs were made on the following:

Hydrants, various styles	179
Gates, various sizes	72
Hydrant wastes	145
Cocks, various sizes	107
Couplings, various sizes	488

Carpenter Shop — Manufactures.

Hydrant, gate, and meter boxes	1,519
--------------------------------	-------

Blacksmith Shop.

Picks pointed	10,524
Picks re-steeled	323

An idea may be had of the widely diversified nature of the work performed by our mechanics and artisans by examining the following statement. The work compares with similar work performed by outsiders making a specialty of the same. A most important feature of the year was the establishment of a wheelwright plant. We now perform all repairs to our rolling-stock and even manufacture wagons when required.

- Ice-house built at East Boston, dimensions forty by eighty.
- Ice-house built at Brookline, dimensions forty by sixty-five.
- 1,700 tons of ice cut and stored.
- 1,150 feet of Fisher avenue roadway macadamized.
- Street built through Fisher Hill Reservoir grounds — about 800 feet long.
- Stone wall, sixty-nine feet long and three feet nine inches high, built at Brookline Reservoir.
- Stone wall, 600 feet long, rebuilt at Brookline Reservoir.
- Manufactured the following office furniture :
 - One cabinet.
 - Two desks.
 - One card holder.
 - One large oak cashier's desk.
 - One combination counter and cabinet.
 - One file case.
- Erected stable at Brookline Reservoir, dimensions thirty by fifteen.
- Erected house at Brookline Reservoir for storage purposes.
- Graded driveway and cleaned grounds at Brookline and Fisher Hill.
- Repaired and painted fence at Parker Hill Reservoir.
- Built new fence, 1,468 feet long, at Brookline Reservoir.
- Repaired old fence, for a distance of 1,071 feet, at Brookline Reservoir.
- Made hay at Brookline and Fisher Hill Reservoirs (twenty tons).
- Built bulkhead at Long Island.
- Maintained buildings in outside yards in good order.
- Fertilized grounds at the Brookline and Fisher Hill Reservoirs.
- Straightened and painted fence around East Boston Reservoir.
- Made sewer connections at Charlestown stable.
- Fitted up four thawing boilers and made apparatus to be used in connection with the same.
- Made two derricks.
 - “ twenty-four plumbers' furnaces.
 - “ sixty-two wrenches.
 - “ three iron crowbars.
 - “ seven jacks.
 - “ six patterns.
 - “ large tool-house.
 - “ fifteen copper shafting pans.
 - “ 539 tools of various kinds.
 - “ one pantograph.
 - “ thirty-four sets of calking tools.
 - “ five step ladders.
 - “ one flag-pole.
 - “ one express wagon.
 - “ ventilators for office.
 - “ one pipe truck.
 - “ one ice-wagon.

Made four small buildings in yard for charcoal, sand and junk.

- “ and fitted up twenty-six lead pots.
- “ brick furnace for use of wheelwright.
- “ forty-four repairs on office furniture.
- “ eleven repairs on steam pipes and fixtures.
- “ thirty-one repairs to pumps.
- “ ninety-seven repairs on wrenches.
- “ twenty repairs on tool-houses.
- “ sixteen repairs on patterns.
- “ nine repairs on derricks.
- “ 228 repairs on tools.
- “ 135 repairs on wagons.
- “ one repair on gas fixtures.
- “ ninety-three repairs on stable.
- “ ninety-two repairs on carriages.
- “ sixty-nine repairs on buildings.
- “ two repairs on engine.
- “ two repairs on large platform scale.

Repaired and painted gate at entrance to yard.

Remodelled hot water apparatus in stable.

Extended steam heating apparatus three times.

Put in two new hoppers in toilet-room.

Extended gas fixtures five times.

Made fifteen repairs on sleighs.

Lettered the stock boxes in storeroom.

Painted buildings outside and inside.

Inspected shafting by order of State Inspector.

Replaced ninety-one panes of window glass.

MAINTENANCE.

We have made 3,432 repairs on pipes of all sizes during the year, for causes of which see table appended. We have had more stoppages by fish this year than for several years previous. They have been especially prevalent in the Charlestown and East Boston Districts. Steps should be taken to eliminate these animals from our supply, as they are a source of inconvenience to consumers and are certainly not agreeable things to associate with our drinking water.

The statement of miscellaneous work performed represents a vast amount of work of a miscellaneous character necessary to the maintenance of our system.

Attention has been given this year, as usual, to the operations in the public streets of corporations, etc., to protect our interests if necessary. Alterations of advantage to us were made by said corporations, contractors, etc., in their original plans, which would not have been made but for vigilance upon our part.

HARBOR SERVICE.

The mains in the harbor and on various islands located therein have been looked after with that care that is most necessary with this branch of our service. We have repeatedly replaced bulkheads and earth material washed away from our pipes by the heavy seas. A sea-wall is now being built at Moon Island and when completed it is expected to serve as a protection against heavy weather, and to render the continual replacing of the covering of our pipes laid in the shore of the island, unnecessary. On Long Island a four-inch private main 731 feet long was laid for the Pauper Institutions from the reservoir to the piggery and ice pond. Services were also laid to the various institutions and to the fortification on the island.

RESERVOIRS AND STAND-PIPES.

East Boston.—This reservoir is in good condition. A most substantial building for the storage of ice was erected here the past winter by the department. It has a capacity of about 875 tons.

Parker Hill.—This property is in first-class condition.

Fisher Hill.—The buildings here have been thoroughly overhauled and repaired, and the grounds graded, fertilized and put in good condition. A road about 800 feet long has been built by this department through the grounds, thus giving vehicles an opportunity to approach the reservoir and the buildings located about it, without driving over the lawn as was heretofore the case.

Brookline Reservoir.—A new wooden fence 1,468 feet long was built on the Walnut street side of the reservoir. The fence on the Boylston street side was repaired for a distance of 1,071 feet. The stone wall on this side was repaired for a distance of about 600 feet and on Warren street a wall 69 feet long and 3 feet 9 inches high was erected. Upon the grounds a stable, an ice-house, and several small buildings for storage purposes were erected. Two wooden bridges were built across the brook. The gate-house was painted inside. The ground was fertilized and two crops of hay raised and harvested. A considerable quantity of property which the Metropolitan Water Board refused to take with other things transferred to their keeping upon January 1, 1898, had to be removed from Chestnut Hill Reservoir to Brookline and Fisher Hill Reservoirs for storage until we can dispose of it to advantage.

Mt. Bellevue Stand-pipe. — This building is in good condition. During the year 5,180 people visited it for observation purposes, it being located on the highest land in the city of Boston.

FIRE RESERVOIRS.

During the year the reservoir at the corner of Pearl and Franklin streets was abandoned on account of the operations of this department. The reservoirs connected with our system were maintained in the usual manner.

PUMPING STATIONS.

West Roxbury. — During the year this station was kept in good order, repairs of minor importance being made from time to time. The steam supply pipe to the pumps was enlarged, thereby increasing the efficiency of the same. This station was to-day transferred by lease to the Metropolitan Water Board, who take it as part of their supply system.

Wayne street. — This station was rendered unnecessary by the completion of the 36-inch high service line through the Elm Hill District and was accordingly abandoned.

East Boston. — This station was rendered unnecessary by the increased supply given East Boston during the year. It has been put out of use, but is still held by the department until a permanently satisfactory supply is assured.

YARDS.

Albany street. — As this yard was in good condition at the beginning of the year nothing of importance has been done since. There still exists the necessity for more room. The steam heating system formerly confined to the offices is now being extended throughout the shops. The various outbuildings situated in the yard have been painted and one was remodelled into a wheelwright shop and a wheelwright's furnace constructed adjacent thereto. A hospital stall was built in the stable and a larger hot water boiler substituted for the old one.

Charlestown, West Roxbury, Brighton, Dorchester and East Boston. — With the exception of certain sanitary improvements made in the Charlestown yard nothing of importance was done in these yards, as they were in good condition at the beginning of the year.

ELECTROLYSIS.

Electrical tests upon the water pipe system throughout the city have been continued this year. Tests have been made upon hydrants and upon service pipes. During the fine weather the hydrants have been tested to determine the electrical potential difference between them and the surrounding earth, and also to ascertain the direction of the tendency of electrical flow. Plans are being prepared showing the results of the tests made at each hydrant. These plans will show the changes in the electrical conditions from time to time, will enable us to determine the points of danger, and will assist in the study of the elimination of the trouble.

IMPROVEMENTS IN KEEPING RECORDS AND ACCOUNTS.

As an indication of the thorough manner in which the records and accounts of the department are now kept, as compared with previous years, I need only state that in 1898 61,834 reports of various kinds were made, as against 18,105 in 1895.

Appended you will find tables showing details of the work performed.

Yours respectfully,

HUGH McNULTY,

General Superintendent Distribution Division.

Table Showing Length of Distribution Mains laid or relaid, and abandoned during the Year 1898, and the total length of the Distribution System of the City of Boston, January 31, 1899.

DIAMETER OF PIPES IN INCHES.																	Totals.
48	42	40	36	30	28	24	20	16	12	10	8	6	4	3	2		
Total connected with system January 31, 1898.....	33,671	16,813	23,104	37,677	77,497	244	72,283	82,715	129,110	961,267	72,092	460,556	1,409,357	129,749	7,906	3,745	3,517,786
Length laid or relaid during the year.....				2,307	4,436	....	9,327	6,207	12,538	63,244	5,124	19,486	46,626	59	.....	.....	169,354
Length abandoned during the year.....				.....	312	.....	.....	888	591	12,705	383	3,010	22,971	6,630	230	250	47,970
Total connected with system January 31, 1899.....	33,671	16,813	23,104	39,984	81,621	244	81,610	88,034	141,057	1,011,806	76,833	477,032	1,433,012	123,178	7,676	3,495	3,639,170 or 689.2 m.

Statement of Hydrant, Blow-off, and Reservoir Pipes, January 31, 1899.

	DIAMETER IN INCHES.								Totals.
	16	12	10	9	8	6	4	3	
Total length in use January 31, 1898.....	472	7,148	100	2,849	1,002	26,082	10,560	3	48,876
Length laid or relaid during the year.....	.....	27	5	.....	66	3,032	143	.....	3,273
Length abandoned during the year.....	.....	35	.....	68	.....	328	1,096	.....	1,527
Total length in use January 31, 1899.....	472	7,140	105	2,781	1,128	29,386	9,607	3	50,622

" laid	37	1,277	6	170	6	198	7	188	6	209	5	111	3	64	4	67	1	9	75	2,293
" abandoned.....	9	267	1	31	1	29	.....	.....	.....	.....	1	38	.....	.....	.....	.....	.....	.....	12	365
" laid	65	1,526	96	2,633	78	2,137	409	9,011½	931	18,166½	320	6,910½	135	3,290½	20	420	.....	.....	2,054	44,155½
" abandoned.....	92	2,496	6	156	7	367½	21	554	20	583	12	282½	2	18	6	100	.....	.....	166	4,477
" "	1	17	.....	.....	4	111	33	766½	2	66	.....	.....	.....	.....	6	94	.....	.....	46	1,054½
Total laid	247	6,614	122	3,470	93	2,615	438	9,957½	957	18,845½	333	7,228½	145	3,528½	29	582	2	25	2,366	52,866½
Total abandoned..	130	3,595	7	187	14	539½	57	1,392½	23	640	15	355½	4	53	13	244	.....	.....	263	7,006½
Net increase.....	117	3,019	115	3,283	79	2,075½	381	8,565	934	18,205½	318	6,873	141	3,475½	16	338	2	25	2,103	45,859½

**Statement of Location, Size and Number of Feet of Main
Pipe Relaid during the Year ending January 31,
1899.**

NOTE.—C. P. indicates City Proper; Rox., Roxbury; W. R., West Roxbury; Bri., Brighton; Dor., Dorchester; So. B., South Boston; E. B., East Boston; Chsn., Charlestown.

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
Tremont st.....	At Common st.....	C. P.	30-in.	12	30-in.
“ “	“ Castle sq.....	“	“	300	“
	Total 30-inch.....			<u>312</u>	
Columbia road....	Edward Everett sq. and Dudley st..	Dor.	20-in.	884	20-in.
Huntington ave....	At Dartmouth st.....	C. P.	“	4	“
	Total 20-inch.....			<u>888</u>	
Beverly st.....	Opposite Fitchburg depot.....	C. P.	16-in.	3	16-in.
Commercial st . .	State and Clinton sts.....	“	“	500	12-in.
Court st.....	Cornhill and Franklin ave.....	“	“	231	6-in.
Tremont st.....	School st. and Scollay sq.....	“	“	4	16-in.
Blue Hill ave.....	At Walk Hill st.....	Dor.	“	50	“
Neponset ave.....	Ashmont st. and Bridge.....	“	“	2,990	6-in.
Ashmont st.....	Neponset ave. and Train st.....	“	“	360	12-in.
Columbia road....	Washington st. and Geneva ave....	“	“	647	12-in.
Columbia road (con- tract).....	Pond and Dudley sts.....	“	“	450	16-in.
Congress st.....	At Railroad tracks.....	So. B.	“	11	“
Dorchester st.....	“ “ Bridge.....	“	“	30	“
New Heath st.....	Columbus ave. and Terrace st.....	Rox.	“	246	6-in.
Terrace st.....	At New Heath st.....	“	“	28	“
Shawmut ave	Massachusetts ave. and Vernon st..	Rox. and C. P.	“	3075	“
Roberts st.....	Brookfield and South Walter sts....	W. R.	“	421	“
Chelsea st.....	At City sq.....	Chsn.	“	8	“
Warren ave.....	Front st. and City sq	“	“	7	“
	Total 16-inch.....			<u>9,061</u>	
Blackstone st.....	At Clinton st.....	C. P.	12-in.	20	12-in.
Shawmut ave.....	West Newton and Rutland sts.....	“	“	36	6-in.
“ “	At Massachusetts ave.....	“	“	20	“
	Carried forward.....			76	

Statement of Main Pipe Relaid. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			76	
West Newton st....	Shawmut ave. and Tremont st.....	C. P.	12-in.	12	12-in.
Pleasant st.....	Opp. Melrose st	"	"	7	"
" "	" Tennyson st.....	"	"	3	"
" "	At " "	"	"	5	"
" "	Opp. Piedmont st.....	"	"	4	"
Worcester st.....	At Shawmut ave.....	"	"	12	6-in.
South Margin st...	Pitts and Staniford sts.....	"	"	543	"
Shawmut ave.....	Rutland st. and Massachusetts ave.	"	"	995	"
Columbus ave.....	Junc. Grenville pl. and Ferdinand st.	"	"	4	12-in.
Northampton st...	At Shawmut ave.....	"	"	24	"
Hull st.....	Salem and Snowhill sts.....	"	"	541	6-in.
Commercial st....	15 ft. south of No. 445-7.....	"	"	5	12-in.
Massachusetts ave.	At Dundee st.....	"	"	4	"
Huntington ave....	" Dartmouth st.....	"	"	25	"
Harrison ave.....	" Randolph st.....	"	"	3	"
" "	" Genesee st.....	"	"	3	"
Harvard st.....	Near No. 17.....	"	"	4	"
Way st.....	Harrison ave. and Albany st.....	"	"	480	"
Fleet st.....	At Moon st.....	"	"	4	"
Tremont st.....	Pleasant and Warrenton sts.....	"	"	205	8-in.
" "	At Castle sq.....	"	"	87	12-in.
North st.....	Junction Lewis st.....	"	"	5	"
Court st.....	Hanover st. and Cornhill.....	"	"	220	"
Hanover st.....	North of Court st.....	"	"	4	"
Prince st.....	At Bennett ave.....	"	"	4	"
Leverett st.....	" Causeway st.....	"	"	9	"
Snow Hill st.....	Opp. Sheafe st.....	"	"	3	6-in.
Albion st.....	Castle and Paul sts.....	"	"	82	"
Paul st.....	Albion and Tremont sts.....	"	"	165	"
Castle st.....	West line of Middlesex st.....	"	"	5	12-in.
Berkeley st.....	Chandler st. and bridge.....	"	"	263	"
Canal st.....	Near Travers st.....	"	"	9	"
Kneeland st.....	Across Atlantic ave.....	"	"	76	6-in.
Dartmouth st.....	Columbus ave. and bridge.....	"	"	185	"
	<i>Carried forward</i>			4,076	

Statement of Main Pipe Relaid.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			4,076	
Way st.....	Harrison ave. and Albany st.....	C. P.	12-in.	20	12-in.
Berkeley st.....	Chandler st. and bridge.....	"	"	34	"
Summer st.....	Atlantic and Dorchester aves.....	"	"	840	8-in.
" ".....	" " and Gilbert pl.....	"	"	567	"
Atlantic ave.....	At Summer st.....	"	"	4	12-in.
Washington st....	Opp. Jordan, Marsh & Co.....	"	"	3	"
Bowdoin st.....	Holiday and Topliff sts.....	Dor.	"	466	"
Bernard st.....	At Helen st.....	"	"	14	"
Clayton st.....	" Freeport st.....	"	"	28	6-in.
Columbia road....	Wales pl. and railroad.....	"	"	348	12-in.
" ".....	Geneva ave. and ".....	"	"	545	"
" ".....	Railroad and Quincy st.....	"	"	766	"
" ".....	Quincy and Glendale sts.....	"	"	733	"
" ".....	Edward Everett sq. and Dudley st..	"	"	1,585	"
Draper st.....	Robinson and Westville sts.....	"	"	145	6-in.
Dudley st.....	At Columbia road.....	"	"	47	12-in.
East Cottage st....	West of Columbia road.....	"	"	5	"
Erie st.....	At Hewins st.....	"	"	15	"
" ".....	" New Seaver st.....	"	"	12	"
Geneva ave.....	Blue Hill ave. and Wilder st.....	"	"	506	6-in.
" ".....	At Columbia road.....	"	"	60	12-in.
Glendale st.....	East of Columbia road.....	"	"	112	6-in.
" ".....	At " ".....	"	"	37	8-in.
Glenway st.....	" York st.....	"	"	12	12-in.
Morton st.....	Opposite Fuller st.....	"	"	12	"
Neponset ave.....	Minot and Walnut sts.....	"	"	277	"
" ".....	At Mill st.....	"	"	12	"
" ".....	" Neponset bridge.....	"	"	120	6-in.
Norfolk st.....	" Morton st.....	"	"	5	12-in.
Park st.....	Dorchester ave. and Geneva ave....	"	"	12	"
Quincy st.....	Columbia road and Stanley st.....	"	"	60	8-in.
" ".....	At Columbia road.....	"	"	147	"
River st.....	Opposite Morton st.....	"	"	15	12-in.
Spencer st.....	Wheatland and Talbot aves.....	"	"	418	6-in.
	<i>Carried forward</i>			12,058	

Statement of Main Pipe Relaid. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			12,058	
Washington st.	At Columbia road	Dor.	12-in.	40	12-in.
Westville st.	Bowdoin st. and Bowdoin sq.....	"	"	339	6-in.
Greenwich st.....	Dorchester ave. and Duncan st....	"	"	212	"
Parker st.....	New Heath and Centre sts.....	Rox.	"	1,332	"
New Heath st.....	Terrace and Parker sts.....	"	"	364	"
Wensley st.	Heath st. and Bickford ave.....	"	"	229	"
" "	At Bickford ave.	"	"	43	8-in.
Columbus ave.....	" New Heath st.....	"	"	7	12-in.
" "	Opposite Old Heath st.....	"	"	23	"
" "	New Heath and Old Heath sts.....	"	"	34	"
Ritchie st.....	At Columbus ave.	"	"	14	"
Francis st.	Brookline ave. and Binney st.....	"	"	328	6-in.
Guild st.	Washington st. and Lambert ave. ..	"	"	767	4-in.
Walnut ave.....	Buena Vista and Rockland sts.....	"	"	9	12-in.
Shawmut ave.....	At Vernon st.....	"	"	33	6-in.
Ruggles st.....	" Shawmut ave.....	"	"	20	12-in.
Vernon st.	" " "	"	"	10	"
LaGrange st.	Centre st. and N.Y., N.H. & H. R.R..	W. R.	"	121	12 & 10
" "	" " " Pleasant st.....	"	"	913	"
Keyes st.....	Washington st. and N.Y., N.H. & H. R.R.	"	"	479	12-in.
Washington st.	At Keyes st.....	"	"	25	"
Spring st.	Centre and Gardner sts.....	"	"	965	"
Jordan st.....	La Grange and Dent sts.....	"	"	257	8-in.
South st.....	Brandon and Conway sts.	"	"	220	12-in.
Florence st.	Ashland and Sycamore sts.	"	"	18	"
Park st.....	At Centre st.....	"	"	16	"
Market st.....	" North Beacon st.....	Bri.	"	10	"
North Beacon st...	" Market st.	"	"	13	"
" " ...	Parsons st. and Barker's lane.....	"	"	23	"
Brooks st.....	At Faneuil Station	"	"	3	"
Water st.....	" Gray st.	Chs'n.	"	48	8-in.
Warren ave.....	Front st. and City sq.	"	"	240	6-in.
Charles River ave..	Water st. and City sq.....	"	"	11	12-in.
	<i>Carried forward</i>			19,224	

Statement of Main Pipe Relaid.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			19,224	
Water st.....	Warren ave. and Charles River ave.,	Chs'n.	12-in.	248	8-in.
“ “.....	At Wapping st.....	“	“	34	“
Byron st.....	“ Saratoga st.	E. B.	“	5	10-in.
Gove st.....	Chelsea and Bremen sts.....	“	“	206	6-in.
Haynes st.....	Orleans and Marginal sts.....	“	“	8	12-in.
Chelsea st.....	Opposite Wesley st.	“	“	6	“
London st.....	At Porter st.....	“	“	6	“
Chelsea st.....	North of Marion st.....	“	“	4	“
“ “.....	At Curtis st.	“	“	585	6-in.
Saratoga st.....	“ Swift st.	“	“	3	“
Bremen st.....	“ Gove st.	“	“	6	“
Webster st.....	“ Cottage st.....	“	“	8	12-in.
Saratoga st.....	“ Trumbull st.....	“	“	6	“
Byron st.....	Saratoga and Bennington sts.	“	“	40	6-in.
Sumner st.	At Jeffries st.....	“	“	138	“
	Total 12-inch.....			<u>20,527</u>	
Minot st.	Opposite Wall st.	C. P.	10-in.	12	10-in.
Norman st.....	Green and Merrimac sts.....	“	“	600	6-in.
Medway st.	Over railroad bridge	Dor.	“	26	10-in.
Sterling st.....	Cabot and Tremont sts.	Rox.	“	230	3-in.
La Grange st.....	Centre and Jordan sts.....	W. Rox.	“	280	12-in.
“ “.....	Centre st. and N.Y., N. H. & H. R.R.,	“	“	40	10-in.
Gove st.....	Chelsea and Bremen sts.	E. B.	“	14	“
Chelsea st.	North of Marion st.....	“	“	15	“
Webster st.	At Cottage st.	“	“	2	“
	Total 10-inch.....			<u>1,219</u>	
Brookline ave.....	Over Railroad bridge.....	C. P.	8-in.	15	8-in.
Brattle st.....	At Court st.....	“	“	37	“
Franklin ave.....	“ “ “	“	“	4	4-in.
Avon st.....	Washington and Chauncy sts.	“	“	65	6-in.
Court sq. (east) ...	At Court st.....	“	“	35	4-in.
Gilbert pl.....	From Summer st.....	“	“	30	6-in.
Nightingale st.....	Bicknell and Wales sts.....	Dor.	“	60	8-in.
	<i>Carried forward</i>			<u>246</u>	

Statement of Main Pipe Relaid. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			246	
Saxton st.....	At Romsey st.	Dor.	8-in.	78	6-in.
Ballou ave.....	From Jones ave.....	"	"	50	8-in.
Rosseter st.	At Bullard st.....	"	"	4	"
Holden st.....	" Columbia road	"	"	26	"
Clifton st.....	From Dudley st.....	Rox.	"	380	6-in. & 4-in.
Bromley pk. (north side).....	Blickford and Albert sts.....	"	"	661	4-in.
Bryant st.....	Parker and St. Stephen sts.....	"	"	25	6-in.
Boylston ave.....	Porter and Cornwall sts.....	W. R.	"	80	8-in.
Powell st.....	Spring and Summer sts.....	"	"	152	"
Summer st.....	At Powell st.	"	"	30	"
South Walter st. ...	South Fairview and Roberts sts.....	"	"	8	"
Morton st.....	At Forest Hills st.	"	"	10	"
Englewood ave....	" Strathmore road.....	Brl.	"	15	"
Chiswick road	" Commonwealth ave.	"	"	18	"
Charles River ave..	Near corner of Water st.	Chs'n.	"	68	6-in.
Water st.....	At Gray st.	"	"	8	8-in.
Mead st.....	Opposite Bunker Hill st.....	"	"	3	"
Bunker Hill st.	North of Short st.....	"	"	6	"
" " "	At Short st.....	"	"	6	"
Charles River ave..	Water st. and City sq.....	"	"	4	"
Princeton st.....	At Marion st.....	E. B.	"	14	"
Chelsea st.	Near Curtis st.....	"	"	3	"
	Total 8-inch.....			1,895	
Fayette st.	Corner Church st.	C. P.	6-in.	4	6-in.
Melrose st.	200 feet from Pleasant st.	"	"	4	"
" "	Corner Pleasant st.....	"	"	4	"
Springfield st.....	At Shawmut ave.....	"	"	9	"
Tennyson st.....	Corner Church st.	"	"	4	"
" "	Junction of Church st.	"	"	9	"
Winchester st.	Cor. Church st.	"	"	4	"
" "	Westerly line of Church st.....	"	"	4	"
" "	Easterly line of Church st.	"	"	4	"
" "	Junction of Church st.	"	"	6	"
	<i>Carried forward</i>			52	

Statement of Main Pipe Relaid.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			52	
Massachusetts ave.,	At Shawmut ave.....	C. P.	6-in.	63	4-in.
" "	Opposite No. 621.....	"	"	4	6-in.
" "	" " 690.....	"	"	4	"
" "	210 feet west of Harrison ave.....	"	"	4	"
" "	Opp. No. 677.....	"	"	4	"
" "	450 feet west of Harrison ave.....	"	"	3	"
" "	Near No. 545.....	"	"	4	"
" "	Opp. No. 563.....	"	"	4	"
" "	" " 527.....	"	"	4	"
Piedmont st.....	50 feet east from Church st.....	"	"	4	"
" ".....	200 feet from Ferdinand st.....	"	"	4	"
" ".....	Cor. Ferdinand st.....	"	"	4	"
Grenville pl.....	At Columbus ave.....	"	"	4	"
" ".....	Columbus ave. and Church st.....	"	"	4	"
Battery st.....	Commercial st. and Ferry-house....	"	"	276	4-in.
Massachusetts ave.	Opp. No. 536.....	"	"	4	6-in.
" "	100 feet east of No. 536.....	"	"	3	"
St. James ave.....	Berkeley and Clarendon sts.....	"	"	4	"
" ".....	" " " ".....	"	"	4	"
Berkeley st.....	Opp. St. James ave.....	"	"	4	"
Massachusetts ave.	" No. 558.....	"	"	4	"
" "	190 feet west of Shawmut ave.....	"	"	4	"
Hanover st.....	Mechanics ct. and Board alley.....	"	"	4	"
Oxford st.....	Near No. 17.....	"	"	4	"
Edinboro st.....	" " 21.....	"	"	4	"
Kneeland st.....	At Whitmore st.....	"	"	9	"
Tyler st.....	Oak and Curve sts.....	"	"	245	"
Kneeland st.....	At Tyler st.....	"	"	5	"
Tyler st.....	" Kneeland st.....	"	"	4	"
Kneeland st.....	" Hudson st.....	"	"	6	"
" ".....	Junction of Hudson st.....	"	"	4	"
Hudson st.....	Harvard and Kneeland sts.....	"	"	4	"
Hull st.....	Snowhill and Commercial sts.....	"	"	351	"
North Hudson st...	From Snowhill st.....	"	"	28	"
	<i>Carried forward</i>			1,137	

Statement of Main Pipe Relaid. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			1,137	
North Hudson st...	At Snowhill st	C. P.	6-in.	4	6-in.
St. James ave.....	Clarendon and Dartmouth sts.....	"	"	6	"
" "	At Clarendon st.....	"	"	4	"
Margaret st.....	Cor. Sheafe st.....	"	"	5	"
" "	At Sheafe st.	"	"	4	"
Cortes st.....	Ferdinand and Berkeley sts.	"	"	14	"
Sheafe st.....	Snowhill and Margaret sts.	"	"	3	"
" "	Cor. Snowhill st.	"	"	4	"
Moon st.....	At Fleet st.....	"	"	3	"
Snowhill st.....	Junction North Hudson st.	"	"	20	4-in.
" "	Cor. " " " "	"	"	4	6-in.
Tileston st.	Wiggin and Hanover sts.	"	"	3	"
Fulton st.	Cor. Lewis st.	"	"	4	"
Clark st.....	Hanover and North sts.	"	"	4	"
" "	Cor. North st.....	"	"	4	"
North Bennet st...	" Hanover st.	"	"	4	"
Haverhill st.	200 feet north of Travers st.....	"	"	10	"
Ferry st.....	At Fulton st.	"	"	19	4-in.
Fulton st.	" Ferry st.	"	"	6	6-in.
" "	" " "	"	"	4	"
North Bennet st...	At Bennet ave.....	"	"	5	"
North Centre st. ...	Hanover and North sts.	"	"	4	"
Wall st.	Minot and Causeway sts.	"	"	700	4-in.
South Market st...	At Commercial st.....	"	"	6	6-in.
" " "	Commercial st. and Merchants row..	"	"	6	"
North " "	At Commercial st.....	"	"	6	"
Commerce st.	" " "	"	"	6	"
Chatham st.....	" " "	"	"	6	"
Bumstead ct.....	From Boylston st.....	"	"	130	4-in.
Blackstone st.....	At Hanover st.	"	"	4	6-in.
Sheafe st.	Snowhill and Salem sts.....	"	"	470	"
Castle st.....	Tremont and Albion sts.....	"	"	90	12-in.
Market st.....	At Merrimac st.....	"	"	4	6-in.
Friend st.....	175 feet from Market st.	"	"	4	"
	<i>Carried forward</i>			2,707	

Statement of Main Pipe Relaid. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			2,707	
Friend st.	North side of Market st.	C. P.	6-in.	4	6-in.
“ “	South “ “ “ “	“	“	4	“
Court sq. (west) ...	At Court st.	“	“	35	4-in.
Lucas st.	Shawmut ave. and Washington st. .	“	“	46	“
Bay st.	At Fayette st.	“	“	32	“
Jefferson st.	“ “ “	“	“	16	“
Pitts st.	At Pitts-street ct.	“	“	3	6-in.
Harwich st.	“ Dartmouth st.	“	“	12	“
Concord st.	Near Cumston st.	“	“	6	“
“ “	At James st.	“	“	3	“
Cumston st.	“ Concord st.	“	“	24	“
Estes pl.	From Summer st.	“	“	3	“
Massachusetts ave. (south side).....	At Shawmut ave.	“	“	15	“
Chester pl.	“ “ “	“	“	8	“
Camden st.	“ “ “	“	“	10	“
Lenox st.	“ “ “	“	“	10	“
Sawyer st.	“ “ “	“	“	4	“
Woodbury st.	“ “ “	“	“	4	“
Kendall st.	“ “ “	“	“	4	“
Hammond st.	“ “ “	“	“	5	“
Ball st.	“ “ “	Rox.	“	2	“
Windsor st.	“ “ “	“	“	4	“
Madison st.	“ “ “	“	“	2	“
Sterling st.	“ “ “	“	“	6	“
Williams st.	“ “ “	“	“	8	“
Willow pk.	“ “ “	“	“	5	“
Winthrop pl.	“ “ “	“	“	6	“
Shawmut ave.	At Vernon st.	“	“	19	“
Notre Dame st.	Bragdon and Dimock sts.	“	“	14	“
Harold st.	Walnut ave. and Munroe st.	“	“	3	“
Wayne st.	At Blue Hill ave.	“	“	9	“
Miles st.	“ Bragdon st.	“	“	5	“
Ernst st.	“ “ “	“	“	5	“
	<i>Carried forward</i>			3,043	

Statement of Main Pipe Relaid. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			3,043	
Newbern st.	Weston and Sterling sts.....	Rox.	6-in.	300	4-in.
Penryth st.....	At Columbus ave.....	"	"	7	6-in.
Decatur ave.....	" " ".....	"	"	31	"
New Heath st.....	" Parker st.....	"	"	16	"
Bromley pk. (south side).....	Bickford and Albert sts.....	"	"	657	4-in.
Bromley st.....	At Bromley pk.....	"	"	25	"
Bickford ave.....	Heath and Wensley sts.....	"	"	331	"
Bickford ave.....	At Wensley st.....	"	"	28	6-in.
Bickford Avenue pl.....	" Bickford ave.....	"	"	11	4-in.
Water st.....	" Keyes st.....	W. R.	"	10	6-in.
Chapin ave.....	From La Grange st.....	"	"	207	"
Pleasant st.....	At " ".....	"	"	8	"
Springvale ave.....	From Spring st.....	"	"	25	"
Brookfield st.....	At Roberts st.....	"	"	12	"
So. Fairview st.....	South and Roberts sts.....	"	"	331	"
Arborway	Across Morton st.....	"	"	17	"
Selkirk road.....	At Chiswick road.....	Bri.	"	15	"
Etna st.....	" Maple ave. and Garden st.....	"	"	8	"
Sidlaw road.....	" Chiswick road.....	"	"	10	"
Henshaw st.....	Market and Bentley sts.....	"	"	76	"
Albert st.....	At Adams st.....	Dor.	"	5	"
Seaver st.....	" Columbia road.....	"	"	7	"
Granger st.....	Near Duncan st.....	"	"	4	"
Jones ave.....	White terrace and Ballou ave.....	"	"	72	"
Centre st.....	At Adams st.....	"	"	72	"
Greenwich st.....	" Clayton st.....	"	"	15	"
Belfort st.....	" Saxton st.....	"	"	3	"
Columbia road....	Blue Hill ave. and Washington st..	"	"	1,056	"
Devon st.....	West of Columbia road.....	"	"	30	"
Bellevue st.....	From " ".....	"	"	44	"
Bodwell st.....	" " ".....	"	"	20	"
Columbia road....	Glendale and Davenport sts.....	"	"	770	12-in.
Bird st.....	From Columbia road.....	"	"	24	6-in.
Sayward st.....	" " ".....	"	"	24	"
	<i>Carried forward</i>			7,314	

Statement of Main Pipe Relaid.—*Concluded.*

In what Street.	Between what Streets.	District.	Size.	Length.	Original Size.
	<i>Brought forward</i>			7,314	
Hamlet st.....	From Columbia road	Dor.	6-in.	22	6-in.
Eastman st.....	" " "	"	"	23	"
Gold st.....	A and B sts.....	So. B.	"	320	4-in.
N st.....	At Broadway.....	"	"	4	6-in.
Sayward pl.....	" Woodward st.....	"	"	30	4-in.
Glovers ct.....	" " "	"	"	12	"
Fifth st.....	" O st.....	"	"	12	6-in.
Third st.	" " "	"	"	6	"
Sixth st.....	" M st.....	"	"	24	"
Sixth st.....	" O st.....	"	"	24	"
Seventh st.	" M st.....	"	"	12	"
B st.....	" Third st.....	"	"	12	"
Third st.	" C st.....	"	"	21	"
" "	" B st.....	"	"	21	"
Second st.....	" I st.....	"	"	28	"
I st.	" Second st.	"	"	6	"
Cottage st.	" Bunker Hill st.....	Chn.	"	54	4-in.
Mead st.....	" " " "	"	"	27	"
Warren ave.	Front st. and City sq.	"	"	15	6-in.
Haynes st.....	Orleans and Marginal sts.	E. B.	"	653	4-in.
Bremen st.....	North corner of Gove st.	"	"	6	6-in.
" "	South " " " "	"	"	3	"
Princeton st.....	At Prescott st.....	"	"	12	"
Maverick sq.....	" Henry st.....	"	"	11	"
Bremen st.....	" Porter st.....	"	"	8	"
" "	" Brooks st.....	"	"	5	"
Sumner st.....	" Jeffries st.....	"	"	12	"
Webster st.....	" Cottage st.....	"	"	2	"
Princeton st.....	" Marion st.....	"	"	13	"
Chelsea st.....	" Wesley st.....	"	"	5	"
Gove st.....	Chelsea and Bremen sts.....	"	"	18	"
	Total 6-inch.....			8,735	
Fulton pl.....	North and Fulton sts.....	C. P.	4-in.	4	4-in.
Arnold st.....	At Shawmut ave.....	"	"	8	"
Adams pl.....	Near Williams st.....	"	"	15	"
Arnold st.....	At Shawmut ave.....	"	"	8	"
	Total 4-inch.....			35	

**Statement of Location, Size and Number of Feet of
Main Pipe Extended During the year ending January
31, 1899.**

In what Street.	Between what Streets.	District.	Size.	Length.
Geneva ave. (contract)	Columbia road and Washington st....	Dor.	36-in.	1,441
“ “	Bowdoin st. and Columbia road.....	“	“	64
Columbus ave.....	Old Heath and Dimock sts.....	Rox.	“	771
Old Heath st.....	Columbus ave. and Albert st.....	“	“	31
	Total 36-inch.....			<u>2,307</u>
Geneva ave.....	Bowdoin st. and Columbia road.....	Dor.	30-in.	2,270
Washington st.....	From Bowdoin st.....	“	“	154
Bowdoin st.....	Washington st. and Geneva ave.....	“	“	1,700
	Total 30-inch.....			<u>4,124</u>
Columbia road.....	Geneva ave. and R.R.....	Dor.	24-in.	1,778
“ “	R.R. and Quincy st.....	“	“	550
“ “	Quincy and Glendale sts	“	“	6
South st.....	Morton st. and Arnold Arboretum	W. R.	“	1,533
“ “	Walter and Roberts sts.....	“	“	420
“ “	Dudley ave. and Centre st.....	“	“	1,792
Walter st.....	Arnold Aboretum and South st.....	“	“	3,248
	Total 24-inch.....			<u>9,327</u>
Columbia road.....	Quincy and Glendale sts.....	Dor.	20-in.	689
“ “ (contract)	Pond and Dudley sts.....	“	“	76
“ “	Glendale and Hancock sts.....	“	“	1,005
“ “	Cushing ave. and Hancock st.....	“	“	474
Edward Everett sq..	At Columbia road.....	“	“	6
Third st.....	Dorchester and N sts.....	So. B.	“	3,014
Roberts st.....	At South st.....	W. R.	“	55
	Total 20-inch.....			<u>5,319</u>
Shawmut ave.....	At Massachusetts ave.....	C. P.	16-in.	16
Ashmont st.	Neponset ave. and Train st.....	Dor.	“	677
Columbia road	Blue Hill ave. and Washington st....	“	“	1,443
Edward Everett sq..	At Columbia road.....	“	“	88
	<i>Carried forward</i>			<u>2,224</u>

Statement of Main Pipe Extended. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			2,224
Columbia road.....	O and P sts.....	So. B.	16-in.	180
Wensley st.....	Across Heath st.....	Rox.	"	109
Roberts st.....	Brandon and South sts.....	W. R.	"	913
Corinth st.....	Across Brandon st.....	"	"	51
	Total 16-inch....			<u>3,477</u>
Pearl st.....	Franklin and Milk sts.....	C. P.	12-in.	292
Devonshire st.....	Spring lane and Milk st.....	"	"	95
Private way.....	Off Dorchester ave.....	"	"	63
Dorchester ave.....	Summer st. and bridge.....	"	"	1,470
Blackstone st.....	At Clinton st.....	"	"	4
Huntington ave.....	At Dartmouth st.....	"	"	12
Berkeley st.....	Chandler st. and R.R.....	"	"	66
Hillsdale st.....	From Richfield st.....	Dor.	"	329
Dorchester ave.....	Edwin and Lonsdale sts.....	"	"	382
Hamilton st.....	Speedwell and Stonehurst sts.....	"	"	176
" ".....	" " Homes ave.....	"	"	176
Bay st.....	Auckland and Leeds sts.....	"	"	137
Fairmount st.....	Milton ave. and Morton st.....	"	"	1,438
Geneva ave.....	Bowdoin and Holiday sts.....	"	"	84
Park st.....	Waldeck and Greenbrier sts.....	"	"	365
Massachusetts ave....	Clapp st. and R.R.....	"	"	300
Welles ave.....	Carlisle st. and Talbot ave.....	"	"	149
Hewins st.....	Erie st. and Columbia road.....	"	"	640
Geneva ave.....	From Bowdoin st.....	"	"	226
Mill st.....	Neponset ave. and Train st.....	"	"	233
Normandy st.....	At Devon st.....	"	"	51
Homes ave.....	Topliff and Draper sts.....	"	"	926
Hamilton st.....	At Homes ave.....	"	"	28
Morton st.....	From Blue Hill ave.....	"	"	140
Hewins st.....	" Columbia road.....	"	"	26
Seaver st.....	At Columbia road.....	"	"	66
Proposed st.....	" " ".....	"	"	72
Hamilton st.....	" " ".....	"	"	80
	<i>Carried forward</i>			<u>7,976</u>

Statement of Main Pipe Extended. — *Continued*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			7,976
Columbia road	Glendale and Hancock sts.....	Dor.	12-in.	717
“ “	Across Columbia road at Bird st.....	“	“	71
Edward Everett sq... ..	At Columbia road.....	“	“	58
Bowdoin st.	At Washington st.....	“	“	17
Clayton st.....	Fenton st. and Freeport st.....	“	“	309
Columbia road.....	Wales place and R.R.	“	“	30
Draper st.	Robinson and Westville sts.....	“	“	14
Norfolk st.....	At Morton st.....	“	“	15
Spencer st.....	Wheatland and Talbot aves.....	“	“	211
Columbia road	Geneva ave. and R.R.	“	“	690
Hamilton st.....	At Columbia road.....	“	“	30
Glendale st.....	“ “ “	“	“	77
Bird st.....	“ “ “	“	“	40
Quincy st.....	Columbia road and Stanley st.....	“	“	114
Magnolia st.....	Lawrence ave. and Quincy st.....	“	“	250
D st.....	First and Bullock sts.....	S. B.	“	784
Private way.....	A and Sleeper sts.....	“	“	500
“ “	Sleeper st. and Harbor Commissioners' Line.....	“	“	134
Sleeper st.....	Between above mentioned private ways.....	“	“	30
A st.....	At Summer-st. bridge.....	“	“	27
Summer-st. bridge....	At abutment wall.....	“	“	6
Third st.....	Dorchester and I sts.	“	“	18
Wensley st.....	Heath st. and Bickford ave.....	Rox.	“	480
Heath st.....	At Wensley st.....	“	“	11
Columbus ave.....	Centre and Dimock sts.....	“	“	829
Ritchie st.....	Across Columbus ave.....	“	“	112
Brookline ave.....	Francis st. and Kenwood road.....	“	“	201
Calumet st.	Iroquois st. and Parker Hill ave.....	“	“	868
Francis st.....	Brookline and Huntington aves.....	“	“	1,101
Terrace st.	At Tremont st.....	“	“	43
Jersey st.....	Across Peterborough st.....	“	“	70
“ “	“ Queensbury st.....	“	“	57
Lawn st.....	Heath and Ellingwood sts.....	“	“	223
	<i>Carried forward</i>			16,113

Statement of Main Pipe Extended. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			16,113
Ipswich st.....	Boylston st. and Charlesgate East	Rox.	12-in.	784
Atkinson st.	From Swett st.....	"	"	641
Roberts st.	At South st.....	W. R.	"	18
Centre st.	At Congreve st.....	"	"	65
" " "	Hastings and Park sts.	"	"	282
Maple st.....	From Weld st.....	"	"	366
Mt. Vernon st.....	Libby and Potomac sts.	"	"	436
" " "	Temple and Baker sts.....	"	"	466
Baker st.....	At Mt. Vernon st.....	"	"	9
La Grange st.....	" " " "	"	"	6
Penfield st.....	Birch and Amherst sts.....	"	"	278
Catalpa st.	Across Perkins st.....	"	"	25
Hamilton st.	Gould and Billings sts.....	"	"	165
Gould st.	Spring and Hamilton sts.....	"	"	176
Montclair ave.....	South from Fletcher st.....	"	"	275
Gardner st.....	Spring and Baker sts.	"	"	242
Weld st.	At Walter st.....	"	"	51
Belgrade ave.	Lorraine and Montello sts.....	"	"	237
Jamaicaway	At Pond st.....	"	"	28
"	" Perkins st.....	"	"	17
Arborway	" Forest Hills st.....	"	"	22
Angell st.....	Blue Hill ave. and Canterbury st.	"	"	431
Park st.....	Montview and Corey sts.....	"	"	459
Williams st.	Washington and Stedman sts.....	"	"	285
Forest Hills st.....	From Morton st.....	"	"	387
Selwyn st.	Mozart ave. and Walter st.....	"	"	499
Corey road.....	Summit ave. and Washington st.....	Brl.	"	228
Litchfield st.....	Ascot and Dumas st.....	"	"	586
Kenrick st.....	Foster st. and Lake st.....	"	"	279
Water st.....	Warren ave. and Charles River ave. ..	Chs'n.	"	6
"	At Wapping st.	"	"	4
Byron st.....	Saratoga and Bennington sts.....	E. B.	"	83
Frankfort st.....	Off Maverick st.....	"	"	45
Marginal st.....	East of Jeffries st.....	"	"	48
	<i>Carried forward</i>			24,042

Statement of Main Pipe Extended.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			24,042
Squantum st.....	Atlantic st. and Moon Island road	Quincy.	12-in.	7,950
Atlantic st.....	Hancock and Squantum sts.....	"	"	3,178
Hancock st.	Atlantic ave. and drawbridge	"	"	1,545
Moon Island road (contract).....	Between Squantum and Moon Isl- and.....		"	6,002
	Total 12-in.....			42,717
Summer st.....	Gilbert pl. and Dorchester ave.	C. P.	10-in.	254
Dorchester ave.	Summer st. and bridge	"	"	1,387
Capen st.....	From Fairmount st.....	Dor.	"	56
Roxton st.....	Glenway and Greenwood sts.....	"	"	48
Normandy st.....	From Columbia road.....	"	"	172
Saxton st.	Hartland and Romsey sts.....	"	"	200
Normandy st.....	From Columbia road.....	"	"	27
Sterling st.....	Tremont and Newbern sts.	Rox.	"	97
Brandon st.	Dudley ave. and Penfield st.	W. R.	"	183
Westbourne road....	Beech and Cornell sts.....	"	"	496
Colberg ave.....	Arden and Rexham sts.....	"	"	103
Fairbanks st.....	Washington and Faneuil sts	Bri.	"	861
Webster st.....	At Cottage st.....	E. B.	"	7
Chelsea st.....	North of Marion st.	"	"	9
	Total 10-inch.....			3,905
St. James ave.....	From Dartmouth st.....	C. P.	8-in.	100
Avon st.....	Washington and Chauncy sts.....	"	"	43
Proposed street	From Fairmount st.....	Dor.	"	20
Waldeck street.....	At Alpha road.....	"	"	5
Carlisle st.....	Brent st. and Welles ave.....	"	"	196
Greenwood st.....	May and Roxton sts.....	"	"	180
Nightingale st.....	Bicknell st. and Talbot ave.....	"	"	758
Carlisle st.....	Centre and Brent sts.	"	"	355
" "	Brent st. and Welles ave.	"	"	146
Fenton st.....	Duncan and Clayton sts.....	"	"	120
Duncan st.....	Granger and Fenton sts.	"	"	185
	<i>Carried forward</i>			2,108

Statement of Main Pipe Extended. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			2,108
Duncan st.....	Leonard and Granger sts.....	Dor.	8-in.	100
Torrey st.....	Withington and Gordon sts.....	"	"	120
" ".....	Leonard and Chipman sts.....	"	"	180
Greenwood st.....	May and York sts.....	"	"	24
Willowwood st.....	Lauriat ave. and Harwood st.....	"	"	181
York st.....	From Glenway st.....	"	"	290
Lindsay st.....	" Greenbrier st.....	"	"	198
Raven st.....	" Crescent ave.	"	"	175
Bullard st.....	" Rosseter st.	"	"	195
Raven st.....	" Crescent ave.	"	"	286
Mt. Ida road.....	" Bowdoin st.....	"	"	773
Stanwood st.	At Columbia road.....	"	"	20
Ballou ave.....	From Jones ave.....	"	"	167
Rosseter st.	At Bullard st.....	"	"	11
Saxton st.	Belfort and Romsey sts.....	"	"	282
Holden st.	At Columbia road.....	"	"	94
Binford st.	From A st.....	S. B.	"	500
Cipher st.....	At D st.	"	"	10
Anchor st.....	" " ".....	"	"	10
Langdon st.....	George st. and Norfolk ave.	Rox.	"	313
Turner st.	At Astor st.	"	"	6
West Walnut pk.....	Copley st. and Amory st.....	"	"	712
Copley st.	West Walnut pk. and Columbus ave..	"	"	296
Iroquois st.....	Calumet and Hillside sts.....	"	"	1,009
Bryant st.	St. Stephen st. and Huntington ave. ..	"	"	229
Ifley road	Walnut ave. and Washington st.	"	"	363
Vila st.	Across Francis st.	"	"	52
" ".....	" Kenwood road.....	"	"	58
New street off Peter- borough st. (next to Jersey st.).....	Across Peterborough st.....	"	"	51
Queensbury st.....	Audubon road and Audubon road....	"	"	1,799
New street off Queens- bury st. (next to Jersey st.).....	Across Queensbury st.	"	"	55
Whittemore st.....	Montview and Crest sts.....	W. R.	"	881
	<i>Carried forward</i>			11,048

Statement of Main Pipe Extended. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			11,048
Montview st.	Park and Mt. Vernon sts.	W. R.	8-in.	352
Clifford st.	Canterbury st. and Grew ave.	"	"	156
Malcolm st.	Colberg and Belgrade aves.	"	"	213
Brandon st.	Amherst and Linden sts.	"	"	176
Aldrich st.	Beech and Cornell sts.	"	"	230
Cornell st.	Poplar and Kittredge sts.	"	"	727
South Fairview st. ...	Across Roberts st.	"	"	50
South Walter st.	South and South Fairview sts.	"	"	362
Rowe st.	Allen and Ashland sts.	"	"	318
Mt. Vernon st.	At Garfield ave.	"	"	50
Garfield ave.	Mt. Vernon and Corey sts.	"	"	957
Montello st.	Belgrade and Colberg aves.	"	"	237
Cass st.	Across Spring st.	"	"	57
"	Oak ave. and Powell st.	"	"	152
Arborway	Across Pond st.	"	"	63
Winslow st.	Perham and Temple sts.	"	"	150
Bourne st.	Catherine and Canterbury sts.	"	"	409
Sycamore st.	Hawthorne and Ashland sts.	"	"	221
Selwyn st.	Knoll and Walter sts.	"	"	9
Malvern st.	Brighton ave. and Ashford st.	Brl.	"	730
Chiswick road.	Chestnut Hill ave. and Sidlaw road. ...	"	"	606
George st.	At Spring st.	"	"	10
Wirt st.	Henshaw and Washington sts.	"	"	285
Princeton st.	At Marion st.	E. B.	"	2
Hancock st.	Atlantic ave. and drawbridge.	Quincy	"	21
	Total 8-inch.			<u>17,591</u>
Charlesgate East.	At Ipswich st.	C. P.	6-in.	8
Roosevelt st.	Camden and Northampton sts.	"	"	377
Massachusetts ave. ..	At N.Y., N.H. & H. R.R.	"	"	63
Trinity pl.	St. James ave. and Stuart st.	"	"	173
Stuart st.	Dartmouth st. and Trinity pl.	"	"	293
Avon st.	Washington and Chauncey sts.	"	"	4
Springfield st.	At Shawmut ave.	"	"	3
Bellevue st.	Columbia road and Trull st.	Dor.	"	164
	<i>Carried forward</i>			<u>1,085</u>

Statement of Main Pipe Extended.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			1,085
Mora st.	Milton ave. and Washington st.	Dor.	6-in.	300
Wave ave.	From Savin Hill ave.	"	"	143
Auckland st.	Savin Hill ave. and Bay st.	"	"	21
Columbia road.	Washington and Seaver sts.	"	"	12
Dawson st.	Mallett and Templeton sts.	"	"	154
Corona st.	Bowdoin st. and Geneva ave.	"	"	165
Selden st.	Capen st. and Milton ave.	"	"	333
Leedsville st.	Adams st. and Dorchester ave.	"	"	293
New street off Leeds- ville st. ....	.....	"	"	23
Carlos st.	Lauriat and Chapman aves.	"	"	27
Maryland st.	Bay st. and Savin Hill ave.	"	"	93
Alpha road.	From Waldeck st.	"	"	160
Brent st.	At Carlisle st.	"	"	32
Nottingham st.	Bowdoin ave. and Bullard st.	"	"	76
Carmen st.	From Faxon st.	"	"	52
Joseph st.	" Carlisle st.	"	"	23
Ridge road	" Park st.	"	"	345
Nottingham st.	Bowdoin ave. and Bullard st.	"	"	36
Gardner ave.	From Savin Hill ave.	"	"	48
Greenwich pl.	Freeport st. and Dorchester ave.	"	"	90
Withington st.	Euclid st. and Torrey st.	"	"	85
Whitby terrace.	From Pleasant st.	"	"	225
Wales st.	At Nightingale st.	"	"	45
Peverell st.	Salcombe st. and Sawyer ave.	"	"	369
New Seaver st.	Erie st. and Columbia road.	"	"	119
Houghton st.	Mill st. and Tileston pl.	"	"	298
Burt ave.	Washington and Ashmont sts.	"	"	232
White terrace.	Lauriat and Jones aves.	"	"	87
Johnston terrace.	From Lauriat ave.	"	"	170
Downer ave.	Sawyer ave. and Pleasant st.	"	"	126
Harwood st.	From Willowwood st.	"	"	270
Spencer st.	West Park and Athelwold sts.	"	"	52
Devon st.	Columbia road and Blue Hill ave.	"	"	260
Avondale ter.	From Richmond st.	"	"	274
	<i>Carried forward</i>			6,123

Statement of Main Pipe Extended.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			6,123
St. Gregory's ct.....	From Avondale ter.....	Dor.	6-in.	3
Middleton ave.....	" Norfolk st.....	"	"	129
Elmo st.	" Erie st.	"	"	283
Dakota st.....	Greenbrier and Washington sts.	"	"	502
Claybourne st.	Dakota and Bowdoin sts.....	"	"	483
Hartland st.....	From Saxton st.	"	"	112
Potosi st.....	Percival ave. and Mt. Ida road.....	"	"	384
Draper st.....	From Bowdoin st.	"	"	604
Wilder road.....	" Columbia road.....	"	"	25
Pinckney road	" " "	"	"	25
Michigan ave.....	" " "	"	"	27
Seaver st.....	At Columbia road.....	"	"	58
Proposed st.....	From east side of Columbia road.....	"	"	17
" "	" west " " " "	"	"	18
Bowdoin ave.	" Columbia road.....	"	"	24
Columbia road.....	Geneva ave. and railroad.....	"	"	1,780
Devon st.....	East of Columbia road	"	"	27
Proposed st.....	Off west side of Columbia road between Brunswick st. and railroad...	"	"	18
" "	Off west side of Columbia road between Brunswick st. and railroad...	"	"	18
Columbia pl.	From Columbia road.....	"	"	23
" road.....	Railroad and Quincy st.....	"	"	550
" "	Quincy st. and Glendale st.....	"	"	698
" "	Glendale and Hancock st.	"	"	154
" "	Edward Everett sq. and Holden st.	"	"	947
Edward Everett sq...	At Columbia road.....	"	"	8
Mt. Everett st.....	From Quincy st.	"	"	23
Stanley st.	Quincy and Bellevue sts.	"	"	105
Rockwell st.....	Washington st. and Milton ave.	"	"	307
Massasoit ave.....	From Talbot ave.	"	"	505
Jones ave.....	White ter. and Ballou ave.	"	"	213
Columbia road.....	Blue Hill ave. and Washington st.....	"	"	400
" "	Geneva ave. and Washington st.....	"	"	658
Gayland ave.....	From Judson st.....	"	"	265
	<i>Carried forward</i>			15,516

Statement of Main Pipe Extended.—*Continued.*

In What Street.	Between What Streets.	District.	Size.	Length.
	<i>Brought forward</i>			15,516
Brunswick st.	At Columbia road.	Dor.	6-in.	24
Magnolia sq.	From Magnolia st.	"	"	55
Dean ave.	Howard ave. and Judson st.	"	"	15
Dudley st.	Howard ave. and W. Cottage st.	"	"	365
W. Cottage st.	From Dudley st.	"	"	109
Half Moon st.	From Magnolia st.	"	"	347
Wales pl.	At Columbia road	"	"	19
Columbia road (con- tract)	Dudley and Pond sts.	"	"	617
Gold st.	A and B sts.	So. B.	"	105
Peters st.	Sixth and Seventh sts.	"	"	300
I st.	At Second st.	"	"	9
O st.	" Columbia road	"	"	11
East Broadway	N and O sts.	"	"	182
Dove ct.	From Dove st.	Rox.	"	133
Wabeno st.	Wabon and Wyoming sts.	"	"	260
Ball st.	At Shawmut ave.	"	"	5
Waumbeck st.	Humboldt ave. and Harold st.	"	"	495
Penryth st.	Across Columbus ave.	"	"	29
Culbert pl.	" " "	"	"	64
Decatur ave.	" " "	"	"	29
Cherokee st.	Hillside and Pontiac sts.	"	"	234
Astor st.	Massachusetts ave. and Hemenway st.	"	"	910
Whipple st.	At Astor st.	"	"	8
Columbus ave.	Centre and Dimock sts.	"	"	547
Madison st.	At Shawmut ave.	"	"	6
Ernst st.	W. Walnut pk. and Bragdon st.	"	"	369
Miles st.	" " " " " "	"	"	318
Arklow st.	Walden and Round Hill sts.	"	"	87
Kenwood road.	Brookline and Huntington aves.	"	"	1480
New st. off Kenwood road, 1st from Hun- tington ave.	Across Kenwood road.	"	"	56
New st. off Kenwood road, 2d left from Huntington ave.	" " "	"	"	35
	<i>Carried forward</i>			22,739

Statement of Main Pipe Extended. — *Continued.*

In What Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			22,739
New st. off Francis st., 1st from Huntington ave.....	Across Francis st.....	Rox.	6-in.	53
New street off Fran- cis st., 2d right from Huntington ave....	" " "	"	"	13
Binney st.....	Across Francis st.....	"	"	14
St. Stephen st.....	Bryant and Gainsboro sts.	"	"	843
New st., off St. Ste- phen st., 1st left from Bryant.....	Across St. Stephen st.	"	"	37
New st., off St. Ste- phen st., 1st right from Bryant.....	" " " "	"	"	20
New st., off St. Ste- phen st., 2d left from Bryant.....	" " " "	"	"	37
Harold st.	Munroe st. and Walnut ave.....	"	"	397
Stony Brook pl.....	Columbus ave. and Centre st.....	"	"	107
Newbury st.....	Across Brookline ave.....	"	"	42
Bray st.	Columbus ave. and Washington st. ...	"	"	328
Bragdon st.....	" " " Amory st.....	"	"	635
Peterborough st.	Audubon road and Audubon road ...	"	"	1,883
Brookledge st.	Humboldt ave. and Elm Hill ave.. ...	"	"	305
Hartwell st.	Georgia and Schuyler sts.....	"	"	533
Greenville st.....	Dudley and Winthrop sts.....	"	"	4
Potomac st.....	Mt. Vernon and Yorktown sts.....	W. R.	"	917
Otis pl.	Off Norfolk st.....	"	"	133
Durant st.....	Off Baker st.....	"	"	592
Woodman st.....	St. Joseph and Jamaica sts.	"	"	72
St. Joseph st.....	Woodlawn and South sts.....	"	"	160
Sylvia st.	Forest Hills and Washington sts.	"	"	100
Francis st.....	At Mt. Vernon st.....	"	"	4
Rhoda st.....	From Central st.	"	"	172
Newberg st.	Berry and Cornell sts.	"	"	204
Congreve st.....	South and Centre sts.....	"	"	312
So. Conway st.....	At So. Fairview st.	"	"	28
So. Fairview st.....	So. Walter and Roberts sts.....	"	"	34
Alaric st.....	Across Spring st.....	"	"	55
	<i>Carried forward</i>			30,773

Statement of Main Pipe Extended. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			30,773
Orange st.....	Cornell and Beech sts.....	W. R.	6-in.	329
Rexham st.....	Belgrade and Colberg aves.....	"	"	48
March ave.....	Park and Bellevue sts.....	"	"	275
Stony Brook st.....	Williams and Keyes sts.....	"	"	154
Mozart ave.....	Selwyn and Walter sts.....	"	"	175
Arborway.....	At Forest Hills st.....	"	"	13
Sycamore st.....	At Prospect ave.....	"	"	272
Prospect ave.....	" Sycamore st.....	"	"	86
Brook st.....	" " "	"	"	120
Leicester st.....	Washington and Surrey sts.....	Bri.	"	239
Surrey st.....	Market and Leicester sts.....	"	"	171
Portsmouth st.....	Lincoln and School sts.....	"	"	178
Beacon st.....	Chestnut Hill ave. and Brookline line,	"	"	68
Hardwick st.....	Dunboy and Bigelow sts.....	"	"	180
Willard pl.....	From North Harvard st.....	"	"	354
Gardner st.....	Across Malvern st.....	"	"	66
Lothian road.....	" Chiswick road.....	"	"	37
Ascot st.....	At Litchfield st.....	"	"	5
Benson st.....	" " "	"	"	5
Cygnest st.....	" " "	"	"	5
Spring st.....	Murdock and Etna sts.....	"	"	354
" "	George and " "	"	"	136
Etna st.....	North Beacon and Spring sts.....	"	"	226
" "	Cypress road and Elmira st.....	"	"	339
Ridge road.....	At Etna st.....	"	"	3
Wicklow st.....	Market and North Beacon sts.....	"	"	264
Sparhawk st.....	Murdock and Cambridge sts.....	"	"	210
Essex st.....	Commonwealth ave. and Charles river,	"	"	3
Oak Square ave.....	Washington and Faneuil sts.....	"	"	997
Peaceable st.....	Rockland and Winship sts.....	"	"	78
Henshaw st.....	Market and Bentley sts.....	"	"	335
" "	Menlo and Cambridge sts.....	"	"	345
Shelby st.....	Princeton and Saratoga sts.....	E. B.	"	154
Meridian st.....	At Falcon st.....	"	"	36
	<i>Carried forward</i>			37,033

Statement of Main Pipe Extended. — *Concluded.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			37,033
Marginal st.....	East of Jeffries st.....	E. B.	6-in.	6
Putnam st.....	East Eagle and Falcon sts.....	"	"	144
Trenton st.....	At Meridian st.....	"	"	10
Monmouth st.....	" " ".....	"	"	10
Eutaw st.....	" " ".....	"	"	8
Princeton st.	" Marion st.	"	"	2
" "	" Prescott st.	"	"	2
Titus road.....	.....	Quincy.	"	667
Hancock st.	Atlantic ave. and drawbridge	"	"	9
	Total 6-inch			37,891
Battery st.....	Commercial st. and ferry-house	C. P.	4-in.	18
Court, off Leonard st., .....	.....	Dor.	"	6
	Total 4-inch			24

Statement of Private Mains Laid during the Year
ending January 31, 1899.

For whom Laid.	Where Laid.	Size.	Length.
Boston Fire Dept. (salt-water main)	Central wharf, between Atlantic ave. and water front	12-in.	680
Boston Terminal Co.....	In yard, between Dorchester and Atlantic aves.	"	562
" " "	In yard, between Dorchester and Atlantic aves.	6-in.	24
Insane Hospital Trustees,	Austin Farm, between Harvard and Canterbury sts.	8-in.	1,195
" " "	Austin Farm, between Harvard and Canterbury sts.	6-in.	22
" " "	Austin Farm, between Harvard and Canterbury sts.	4-in.	6
Pauper Institutions Trustees.....	Long Island, from reservoir to piggery and ice pond.....	"	731
	Total number of feet.		3,220

Statement of Main Pipe Raised, Lowered, and Moved Laterally.

In what Street.	Between what Streets.	District.	Size.	Length.	Raised, Lowered or Moved.
Court st.	Brattle st. and Cornhill.	C. P.	12-in.	200	Lowered.
Way st.	At Harrison ave.	"	"	375	"
Walk Hill st.	Norfolk and Blue Hill aves.	Dor.	"	145	"
North Beacon st.	Parsons st. and Barker's lane. ...	Bri.	"	449	"
Brattle st.	At Court st.	C. P.	8-in.	12	"
Brookline ave.	Across B. & A. R.R. bridge.	"	"	82	Moved.
South Walter st.	South and South Fairview sts. ...	W. R.	"	57	Raised.
Summer st.	Powell and Autumn sts.	"	"	86	Lowered.
Harwich st.	At Dartmouth st.	C. P.	6-in.	163	Raised.
Springvale ave.	From Spring st.	W. R.	"	141	Lowered.
Charlesgate-East ...	At Ipswich st.	C. P.	"	96	"
Total number of feet				1,806	

Statement of Main Pipe Abandoned.

In what Street.	Between what Streets.	District.	Size.	Length.
Tremont st.	At Common st.	C. P.	30-in.	12
" "	" Castle sq.	"	"	300
Total 30-inch				312
Columbia road.	Edward Everett sq. and Dudley st. ...	Dor.	20-in.	884
Huntington ave.	At Dartmouth st.	C. P.	"	4
Total 20-inch				888
Beverly st.	Opp. Fitchburg depot.	C. P.	16-in.	3
Tremont st.	School st. and Scollay sq.	"	"	4
Blue Hill ave.	At Walk Hill st.	Dor.	"	50
Columbia road.	Dudley and Edward Everett sqs.	"	"	478
Congress st.	At railroad tracks.	So. B.	"	11
Dorchester st.	" railroad bridge.	"	"	30
Warren ave.	Front st. and City sq.	Chn.	"	7
Chelsea st.	Cor. of City sq.	"	"	8
Total 16-inch				591

Statement of Main Pipe Abandoned. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
Blackstone st.....	At Clinton st.....	C. P.	12-in.	16
West Newton st.	Shawmut ave. and Tremont st.	"	"	12
Pleasant st.	Opp. Melrose st.	"	"	7
" "	Opp. Tennyson st.....	"	"	3
" "	At " "	"	"	5
" "	Opp. Piedmont st.	"	"	4
Columbus ave.	Junc. Grenville pl. and Ferdinand st..	"	"	4
Commercial st.	15 ft. south of No. 445-7....	"	"	5
Massachusetts ave. ..	At Dundee st.....	"	"	4
Huntington ave.	" Dartmouth st.	"	"	25
Harrison ave.	" Randolph st.....	"	"	3
" "	" Genesee st.	"	"	3
Harvard st.....	Near No. 17.	"	"	4
Way st.....	Harrison ave. and Albany st.	"	"	480
Fleet st.	At Moon st.	"	"	4
North st.....	Junction Lewis st.....	"	"	5
Court st.....	Hanover st. and Cornhill.....	"	"	220
Hanover st.....	East of Court st.....	"	"	4
Prince st.....	At Bennet ave.	"	"	4
Leverett st.....	" Causeway st.	"	"	9
Commercial st.....	State and Clinton sts.....	"	"	500
Castle st.	Tremont and Albion sts.	"	"	158
" "	West line of Middlesex st.....	"	"	5
Federal st.....	Kneeland st. and bridge.....	"	"	1,056
Berkeley st. ..	Chandler " " "	"	"	263
Tremont st.	At Castle st.....	"	"	50
Atlantic ave.	" Summer st.	"	"	4
Canal st.....	Near Travers st.	"	"	9
Washington st.....	Opp. Jordan, Marsh & Co.	"	"	3
Way st.....	Harrison ave. and Albany st.....	"	"	20
Berkeley st. ..	Chandler st. and bridge	"	"	34
Tremout st.	At Castle sq.....	"	"	70
Northampton st.....	" Shawmut ave.....	"	"	24
Columbia road	Glendale and Davenport sts.....	Dor.	"	770
Ashmont st.	Neponset ave. and Train st.....	"	"	360
	<i>Carried forward</i>			4,142

Statement of Main Pipe Abandoned.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			4,142
Columbia road	Washington st. and Geneva ave.....	Dor.	12-in.	650
Bowdoin st.	Holiday and Topliff sts.....	"	"	466
Columbia road.....	Wales pl. and railroad.....	"	"	348
Erie st.....	At Hewins st.....	"	"	15
Bernard st.....	" Helen st.....	"	"	14
Morton st.	Opp. Fuller st.....	"	"	12
Norfolk st.	At Morton st.	"	"	5
River st.....	Opp. Morton st.....	"	"	20
Erie st.	At New Seaver st.	"	"	12
Glenway st.....	" York st.....	"	"	12
Neponset ave.....	" Mill st.....	"	"	12
Park st.	Dorchester and Geneva aves.	"	"	12
Washington st.....	At Columbia road.....	"	"	40
Geneva ave.....	" " "	"	"	60
Columbia road	Geneva ave. and railroad.....	"	"	545
" "	Railroad and Quincy st.....	"	"	766
" "	Quincy and Glendale sts.....	"	"	733
" "	Edward Everett sq. and Dudley st. ...	"	"	1,585
Dudley st.....	At Columbia road	"	"	47
East Cottage st.	West of Columbia road.....	"	"	5
Neponset ave.....	Minot and Walnut sts.....	"	"	277
Ruggles st.....	At Shawmut ave.	Rox.	"	20
Vernon st.....	" " "	"	"	10
Columbus ave.	" New Heath st.	"	"	12
" "	" Old Heath st.	"	"	12
" "	" New Heath and Old Heath sts.	"	"	30
Walnut ave.....	Buena Vista and Rockland sts.	"	"	8
Ritchie st.	At Columbus ave.....	"	"	13
La Grange st.	Centre and Pleasant sts.....	W. R.	"	695
" "	Centre st. and N. Y., N. H. & H. R.R..	"	"	309
Keyes st.	Washington st. and N. Y., N. H. & H. R.R.....	"	"	476
Catalpa st.....	At Perkins st.....	"	"	3
Washington st.....	" Keyes st.....	"	"	20
Spring st.....	Centre and Gardner sts.....	"	"	956
	<i>Carried forward</i>			12,342

Statement of Main Pipe Abandoned. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			12,342
South st.	Brandon and Conway sts.	W. R.	12-in.	183
Florence st.	Ashland and Sycamore sts.	"	"	18
Park st.	At Centre st.	"	"	16
Market st.	" North Beacon st.	Bri.	"	10
North Beacon st.	Parsons st. and Barker's lane.	"	"	21
" " "	At Market st.	"	"	12
Brooks st.	" Faneuil Station	"	"	26
Charles River ave.	Water st. and City sq.	Chs'n.	"	11
Haynes st.	Orleans and Marginal sts.	E. B.	"	8
Byron st.	At Saratoga st.	"	"	5
Gove st.	Chelsea and Bremen sts.	"	"	4
Chelsea st.	At Wesley st.	"	"	6
London st.	" Porter st.	"	"	6
Chelsea st.	North of Marion st.	"	"	4
Webster st.	At Cottage st.	"	"	8
Saratoga st.	" Trumbull st.	"	"	6
Sumner st.	" Jeffries st.	"	"	10
Saratoga st.	" Swift st.	"	"	3
Bremen st.	" Gove st.	"	"	6
	Total 12-inch			<u>12,705</u>
Minot st.	Opp. Wall st.	C. P.	10-in.	12
Medway st.	Over railroad bridge.	Dor.	"	26
La Grange st.	Centre st. and N.Y., N.H. & H. R.R. ...	W. R.	"	320
Byron st.	At Saratoga st.	E. B.	"	5
Gove st.	Chelsea and Bremen sts.	"	"	3
Chelsea st.	North of Marion st.	"	"	15
Webster st.	At Cottage st.	"	"	2
	Total 10-in.			<u>383</u>
Brookline ave.	On B. & A. R.R. bridge.	C. P.	8-in.	15
Tremont st.	Pleasant and Warrenton sts.	"	"	205
Brattle st.	At Court st.	"	"	37
Furnace st.	Federal st. and Cove pl.	"	"	215
Cove st.	Cove pl. and Kneeland st.	"	"	85
	<i>Carried forward</i>			<u>557</u>

Statement of Main Pipe Abandoned. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			557
Summer st.....	Atlantic and Dorchester aves.....	C. P.	8-in.	572
“	Atlantic ave. and Gilbert pl.	“	“	565
Quincy st.....	At Columbia road.....	Dor.	“	147
Glendale st.	“ “ “	“	“	37
Quincy st.....	Columbia road and Stanley st.....	“	“	60
Holden st.....	At Columbia road.....	“	“	26
Rosseter st.....	“ Bullard st.....	“	“	4
Ballou ave.....	From Jones ave.....	“	“	50
Nightingale st.....	Bicknell and Wales st.....	“	“	60
Wensley st.....	At Bickford ave.....	Rox.	“	43
Boylston ave.	Porter and Cornwall sts.	W. R.	“	80
Powell st.	Spring and Summer sts.....	“	“	135
Summer st.....	Powell and Autumn sts.....	“	“	19
South Walter st.	Roberts and South Fairview sts.	“	“	8
Jordan st.	La Grange and Dent sts.....	“	“	235
Morton st.....	At Forest Hills st.	“	“	16
Englewood ave.....	“ Strathmore road	Bri.	“	12
Chiswick road	“ Commonwealth ave.....	“	“	16
Water st.	“ Gray st.	Chs'n.	“	56
Mead st.....	At Bunker Hill st.....	“	“	3
Water st.....	Warren and Charles River aves.....	“	“	248
Charles River ave....	Water st. and City sq.....	“	“	4
Water st.....	At Wapping st.....	“	“	34
Bunker Hill st.....	North of Short st.....	“	“	6
“ “ “	At “ “	“	“	6
Princeton st.....	“ Marion st.....	E. B.	“	14
Chelsea st.....	Near Curtis st.....	“	“	3
	Total 8-in.....			3,010
Cazenove st.....	From Chandler st.....	C. P.	6-in.	150
Harwich st.....	At Dartmouth st.....	“	“	12
Orange st.....	Washington st. and Shawmut ave.	“	“	300
Orange lane.....	Washington st. and Harrison ave.	“	“	200
Massachusetts ave. (south side).....	At Shawmut ave.....	“	“	15
	<i>Carried forward</i>			677

Statement of Main Pipe Abandoned. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			677
Chester pl.....	At Shawmut ave.....	C. P.	6-in.	8
Camden st.....	" " "	"	"	10
Sawyer st.....	" " "	"	"	4
Lenox st.....	" " "	"	"	10
Woodbury st.....	" " "	"	"	4
Kendall st.....	" " "	"	"	4
Hammond st.....	" " "	"	"	11
Shawmut ave.....	West Newton and Rutland sts.....	"	"	36
Fayette st.....	Cor. Church st.....	"	"	4
Melrose st.....	200 feet from Pleasant st	"	"	4
" "	Cor. Pleasant st.....	"	"	4
Worcester st.....	At Shawmut ave.....	"	"	12
Norman st.....	Green and Merrimac sts.....	"	"	600
Avon st.....	Washington and Chauncy sts.....	"	"	65
Springfield st.....	At Shawmut ave.....	"	"	9
Tennyson st.....	Cor. Church st.....	"	"	4
" "	Junction Church st.	"	"	9
Cortes st.....	Ferdinand and Berkeley sts.....	"	"	14
Winchester st.....	Corner Church st.....	"	"	4
" "	Westerly line of Church st.....	"	"	4
" "	Easterly " " " "	"	"	4
South Margin st.	Pitts and Staniford sts.....	"	"	543
Kneeland st.	At Whitmore st.	"	"	9
Winchester st.....	Junction Church st.	"	"	6
Shawmut ave.....	Rutland st. and Massachusetts ave....	"	"	995
Massachusetts ave....	Opposite No. 621	"	"	4
" "	" " 690	"	"	4
" "	210 feet west of Harrison ave.	"	"	4
" "	Opposite No. 677	"	"	4
" "	450 feet west of Harrison ave.	"	"	3
" "	Near No. 545	"	"	4
" "	Opposite No. 563	"	"	4
" "	" " 527	"	"	4
Piedmont st.	About 50 feet easterly from Church st.	"	"	4
	<i>Carried forward</i>			3,089

Statement of Main Pipe Abandoned.—*Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			3,089
Piedmont st.	200 feet from Ferdinand st.	C. P.	6-in.	4
“ “	Corner Ferdinand st.	“	“	4
Grenville pl.	At Columbus ave.	“	“	4
“ “	Columbus ave. and Church st.	“	“	4
Massachusetts ave.	About 100 feet east of No. 536.	“	“	3
“ “	Opposite No. 536	“	“	4
St. James ave.	Berkeley and Clarendon sts.	“	“	4
“ “ “	“ “ “ “	“	“	4
Berkeley st.	Opposite St. James ave.	“	“	4
Massachusetts ave.	“ No. 558	“	“	4
“ “	190 feet west of Shawmut ave.	“	“	4
Dartmouth st.	At Huntington ave.	“	“	25
Oxford st.	Near No. 17	“	“	4
Edinboro st.	“ “ 21	“	“	4
Kneeland st.	At Whitmore st.	“	“	9
Tyler st.	Oak and Curve sts.	“	“	245
Kneeland st.	At Tyler st.	“	“	5
Fulton st.	“ Ferry st.	“	“	10
Tyler st.	“ Kneeland st.	“	“	4
Kneeland st.	“ Hudson st.	“	“	6
“ “	Junction of Hudson st.	“	“	4
Hudson st.	Between Harvard and Kneeland sts. ..	“	“	4
Hull st.	Salem and Snowhill sts.	“	“	541
“ “	Snowhill and Commercial sts.	“	“	351
St. James st.	Dartmouth and Clarendon sts.	“	“	30
“ “ “	At Clarendon st.	“	“	4
Margaret st.	Cor. of Sheafe st.	“	“	5
“ “	At “ “	“	“	4
Sheafe st.	Snowhill and Margaret sts.	“	“	3
“ “	Cor. of Snowhill st.	“	“	4
No. Hudson st.	At Snowhill st.	“	“	4
Dartmouth st.	Buckingham st. and railroad bridge.	“	“	60
Moon st.	At Fleet st.	“	“	3
Snowhill st.	Cor. of No. Hudson st.	“	“	4
	<i>Carried forward</i>			4,465

Statement of Main Pipe Abandoned. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			4,465
Tileston st.....	Wiggin and Hanover sts.....	C. P.	6 in.	3
Fulton st.....	Cor. of Lewis st.....	"	"	4
Clark st.....	Hanover and North sts.....	"	"	4
" ".....	Cor. of North st.....	"	"	4
North Bennet st.....	At Hanover st.....	"	"	4
Hanover st.....	Mechanics ct. and Board alley.....	"	"	4
Haverhill st.....	200 ft. north of Travers st.....	"	"	10
Mt. Washington ave..	Federal st. and bridge.....	"	"	450
Shaving st.....	From Mt. Washington ave.....	"	"	40
North Bennet st....	At Bennet ave.....	"	"	5
North Centre st.....	Hanover and North sts.....	"	"	4
So. Market st.....	From Commercial st.....	"	"	6
" " ".....	Commercial st. and Merchants row....	"	"	6
No. Market st.....	From Commercial st.....	"	"	6
Commerce st.....	" " ".....	"	"	6
Chatham st.....	" " ".....	"	"	6
Blackstone st.....	At Hanover st.....	"	"	4
Pitts st.....	" Pitts-st. ct.....	"	"	3
Sheafe st.....	Snowhill and Salem sts.....	"	"	476
Snowhill st.	Opp. Sheafe st.....	"	"	3
Market st.....	At Merrimac st.....	"	"	4
Friend st.....	175 feet from Market st.....	"	"	4
" ".....	North side " ".....	"	"	4
" ".....	South " " ".....	"	"	4
Court st.....	Cornhill and Franklin ave.....	"	"	231
Albion st.	Castle and Paul sts.	"	"	82
Paul st.....	Albion and Tremont sts.	"	"	165
Mt. Washington ave..	.....	"	"	65
Kneeland st.....	Federal st. and Atlantic av. (Cove st.)	"	"	260
Dartmouth st.....	Columbus ave. and R.R. bridge.....	"	"	185
Worcester st.....	At Shawmut ave.	"	"	12
Concord st.....	Near Cumston st.	"	"	6
" ".....	At James st.....	"	"	3
Cumston st.....	" Concord st.	"	"	24
	<i>Carried forward</i>			6,562

Statement of Main Pipe Abandoned—Continued.

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			6,562
Estes pl.	From Summer st.	C. P.	6-in.	3
Gilbert pl.	" " "	"	"	30
Neponset ave.	Ashmont st. and bridge	Dor.	"	2,990
Geneva ave.	Blue Hill ave. and Wilder st.	"	"	506
Westville st.	Bowdoin st. to Bowdoin sq.	"	"	339
Draper st.	Robinson and Westville sts.	"	"	145
Greenwich st.	Dorchester ave. and Duncan st.	"	"	212
Spencer st.	Wheatland and Talbot aves.	"	"	418
Neponset ave.	At Neponset bridge	"	"	120
Glendale st.	East of Columbia road.	"	"	112
Clayton st.	At Freeport st.	"	"	28
Saxton st.	Belfort and Romsey sts.	"	"	78
Columbia road.	Blue Hill ave. and Washington st.	"	"	1,056
Devon st.	West of Columbia road	"	"	30
Bellevue st.	From Columbia road	"	"	44
Bodwell st.	" " "	"	"	20
Bird st.	" " "	"	"	24
Sawyard st.	" " "	"	"	24
Hamlet st.	" " "	"	"	22
Eastman st.	" " "	"	"	23
Albert st.	At Adams st.	"	"	5
Seaver st.	" Columbia road	"	"	7
Granger st.	Near Duncan st.	"	"	4
Jones ave.	White ter. and Ballou ave.	"	"	72
Centre st.	Near Adams st.	"	"	72
Greenwich st.	At Clayton st.	"	"	20
Belfort st.	" Saxton st.	"	"	3
Columbia road.	Wolcott and Blue Hill aves.	"	"	404
Mt. Vernon st.	At N.Y., N.H. & H. R R.	"	"	125
Bellevue st.	From Columbia road	"	"	31
Glendale st.	East of Columbia road	"	"	30
Bodwell st.	From Columbia road	"	"	30
R st.	South of Ninth st.	So. B.	"	346
N st.	At Broadway	"	"	4
	<i>Carried forward</i>			13,989

Statement of Main Pipe Abandoned. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			13,939
Fifth st.	At O st.	B.	6 in.	12
Third st.	" " "		"	6
Sixth st.	" M st.		"	24
" "	" O st.		"	24
Seventh st.	" M st.		"	12
B st.	" Third st.		"	12
Third st.	" C st.	"	"	27
"	" B st.	"	"	21
Second st.	" I st.		"	28
I st.	" Second st.	"	"	6
New Heath st.	Columbus ave. and Parker st.	Rox.	"	626
Terrace st.	At New Heath st.	"	"	28
Parker st.	New Heath and Centre sts.	"	"	1,332
Decatur ave.	Across Columbus ave.	"	"	31
Bickford ave.	At Wensley st.	"	"	28
Wensley st.	Heath st. and Bickford ave.	"	"	229
Ball st.	At Shawmut ave.	"	"	2
Windsor st.	" " "	"	"	12
Madison st.	" " "	"	"	2
Sterling st.	" " "	"	"	6
Williams st.	" " "	"	"	8
Willow pk.	" " "	"	"	5
Clifton st.	From Dudley st.	"	"	100
Winthrop pl.	At Shawmut ave.	"	"	6
Shawmut ave.	Massachusetts ave. and Vernon st.	C. P. and Rox.	"	3,157
Centre st.	At Columbus ave.	Rox.	"	15
Bryant st.	Parker and St. Stephen sts.	"	"	25
Notre Dame st.	Bragdon st. and Dimock st.	"	"	12
Wayne st.	At Blue Hill ave.	"	"	63
Miles st.	At Bragdon st.	"	"	5
Ernst st.	" " "	"	"	5
Harold st.	Walnut ave. and Munroe st.	"	"	3
Francis st.	Brookline ave. and Binney st.	"	"	328
Roberts st.	Brookfield and South Walter sts.	W. R.	"	421
	<i>Carried forward</i>			20,560

Statement of Main Pipe Abandoned. — *Continued.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			20,560
Brookfield st.....	At Roberts st.....	W. R.	6-in.	12
Springvale st.....	At Spring st.....	"	"	39
Chapin ave.....	From La Grange st.....	"	"	235
Water st.....	At Keyes st.....	"	"	23
South Fairview st. ...	South and Roberts sts.....	"	"	329
Pleasant st.....	At La Grange st.....	"	"	7
Arborway.....	Across Morton st.....	"	"	15
Selkirk road.....	At Chiswick road.....	Bri.	"	13
Etna st.....	" Maple ave. and Garden st.....	"	"	8
Sidlaw road.....	" Chiswick road.....	"	"	6
Gardner st.....	" Malvern st.....	"	"	3
Henshaw st.....	Market and Bentley sts.....	"	"	76
Charles River ave. ...	Corner of Water st.....	Chsn.	"	68
Warren ave.....	Front st. and City sq.....	"	"	280
Charles River ave....	Water st. and City sq.....	"	"	250
Bremen st.....	North corner of Gove st.....	E. B.	"	4
" "	South corner of Gove st.....	"	"	6
Gove st.....	Chelsea and Bremen sts.....	"	"	216
Chelsea st.....	At Wesley st.....	"	"	5
Princeton st.....	" Marion st.....	"	"	13
" "	" Prescott st.....	"	"	12
Chelsea st.....	" Curtis st.....	"	"	585
Webster st.....	" Cottage st.....	"	"	2
Bremen st.....	" Porter st.....	"	"	8
Maverick sq ..	At Henry st.....	"	"	11
Bremen st.....	" Brooks st.....	"	"	5
Byron st.....	Saratoga and Bennington sts.....	"	"	40
Sumner st.....	At Jeffries st.....	"	"	140
	Total 6-inch.....	"	"	22,971
North Hudson st.....	From Snowhill st.....	C. P.	4-in.	28
Arnold st.....	At Shawmut ave.....	"	"	8
Massachusetts ave....	" " "	"	"	63
Battery st.....	Commercial st. and Ferry-house.....	"	"	294
Ferry st.....	At Fulton st.....	"	"	19
	<i>Carried forward</i>			412

Statement of Main Pipe Abandoned. — *Concluded.*

In what Street.	Between what Streets.	District.	Size.	Length.
	<i>Brought forward</i>			412
Snowhill st.....	Junction of North Hudson st.....	C. P.	4-in.	20
Fulton pl.....	North and Fulton sts.....	"	"	4
Bennet ave.....	Prince and North Bennet sts.....	"	"	227
Wall st.....	Minot and Causeway sts.....	"	"	700
Arnold st.....	At Shawmut ave.....	"	"	8
Bumstead ct.....	From Boylston st.....	"	"	220
Franklin ave.....	At Court st.....	"	"	4
Court sq. (east).....	" " "	"	"	35
" " (west).....	" " "	"	"	35
Lucas st.....	Washington st. and Shawmut ave....	"	"	46
Bay st.....	At Fayette st.....	"	"	32
Jefferson st.....	" " "	"	"	16
Cove pl.....	From Cove st.....	"	"	330
Ashton pl.....	From Charles st.....	"	"	50
Gold st.....	A and B sts.....	S. B.	"	320
Sayward pl.....	At Woodward st.....	"	"	30
Glover's ct.....	" " "	"	"	12
Newbern st (J. P. A.)	Weston and Sterling sts.....	Rox.	"	300
Weston st. "	Cabot and Tremont sts.....	"	"	350
Bromley pk. (so. side)	Bickford and Albert sts.....	"	"	657
" " (no. side)	" " " "	"	"	661
" st.....	At Bromley pk.....	"	"	25
Orchard st.....	" Orchard "	"	"	6
Bickford ave.....	Heath and Wensley sts.....	"	"	331
" " pl.....	At Bickford ave.....	"	"	11
Adams pl.....	Near Williams st.....	"	"	11
Guild st.....	Washington st. and Lambert ave....	"	"	763
Clifton st.....	From Dudley st.....	"	"	280
Cottage st.....	At Bunker Hill st.....	Chs'n.	"	54
Mead st.....	" " " "	"	"	27
Haynes st.....	Orleans and Marginal sts.....	E. B.	"	653
	Total 4-Inch.....			6,630
Sterling st. (J. P. A.)	Cabot and Tremont sts.....	Rox.	3-in.	230
Moon Island.....	On beach opp. Long Island.. ..		2-in.	250

**Gates Established and Abandoned during the Year and Number in use January 31, 1899, Exclusive
of Blow-off and Private Gates.**

	DIAMETER IN INCHES.													TOTALS.
	48	40	36	30	24	20	16	12	10	8	6	4	3	
Total number in use Jan. 31, 1898.....	1	7	26	41	62	61	206	1,536	134	994	4,079	713	11	7,931
Established during the year.....	.....	.....	.....	3	4	5	24	157	17	69	296	2	.....	577
Abandoned during the year.....	.....	.....	.....	.....	.....	4	1	35	.....	15	87	26	1	169
Total number in use Jan. 31, 1899. . .	1	7	26	44	66	62	229	1,718	151	1,048	4,288	689	10	8,339

Blow-off Gates Established and Abandoned during the Year.

	DIAMETER IN INCHES.			TOTALS.
	4-in.	6-in.	12-in.	
Number established.....	9	6	1	16
Number abandoned.....	2	2	.....	4
Increase.....	7	4	1	12

Private Gates Established and Abandoned during the Year.

	DIAMETER IN INCHES.					TOTALS.
	3-in.	4-in.	6-in.	8-in.	12-in.	
Number established	1	2	*16	2	2	23
Number abandoned.....	.....	.....	.....	.....	.....	.....
Increase	1	2	16	2	2	23

*Twelve of these gates were established in connection with the salt-water hydrants, and have nothing to do with our system.

Hydrants Established and Abandoned during the Year.

	ESTABLISHED.				Totals.	ABANDONED.				Totals.	Increase.	Decrease.
	Lowry.	B. Lowry.	Post.	Boston.		Lowry.	B. Lowry.	Post.	Boston.			
City Proper (Public)....	56	1	25	....	82	28	4	3	72	107	.....	25
" (Salt Water), ...			12	....	12	.....	.....	.....	.....	.....	12	
South Boston (Public)...	4	4	20	....	28	3	1	....	20	24	4	
East Boston (Public)....	10	2	32	....	44	6	....	....	38	44		
Roxbury (Public)	6	13	63	....	82	20	16	4	9	49	33	
Dorchester (Public)	3	29	119	....	151	30	33	23	6	92	59	
West Roxbury (Public) ..	3	37	45	....	85	4	32	6	5	47	38	
" (Private).			2	....	2	.....	1	.....	1	1	1	
Charlestown (Public) ...			4	....	4	5	.....	.....	5	.....		1
Brighton (Public).....		5	32	....	37	1	8	8	....	17	20	
Deer Island (Private)...			1	....	1	.....	1	.....	1			
Quincy.....			5	....	5	.....	1	.....	1	4		
Total Public.....	82	91	340	....	513	97	94	44	150	385	154	26
Total Private and Suburban.....			8	....	8	.....	3	.....	3	5		
Salt Water Hydrants			12	....	12	.....	.....	.....	.....	12		

Total Number of Hydrants Connected With Distribution System, January 31, 1899.

	Lowry.	Post.	B. Lowry	Boston.	Totals.	NOTES.
City Proper (Public).....	775	329	53	294	1,451	
“ “ (Private).....	10	...	...	45*	55	*27 not for fire.
South Boston (Public).....	229	146	28	165	568	
“ “ (Private).....	2	13*	.....	33*	48	*2 Bostons } *4 Posts } not for fire.
East Boston (Public).....	151	166	27	40	384	
“ “ (Private).....	8	7	.....	25*	40	*7 not for fire.
Roxbury (Public).....	627	416	84	55	1,182	
“ (Private).....	1*	.....	.....	10*	11	*1 Lowry } *1 Boston } not for fire.
Dorchester (Public).....	537	863	243	44	1,687	
“ (Private).....	.....	1*	1	5*	7	*2 Bostons } *1 Post } not for fire.
West Roxbury (Public).....	128	600	226	35	989	
“ “ (Private).....	.....	14	.....	1	15	
Brighton (Public).....	74	350	70	27	521	
“ (Private).....	.....	6	.....	2*	8	*2 not for fire.
Charlestown (Public).....	200	45	37	4	286	
“ (Private).....	14	36	1	6*	57	*1 not for fire.
Deer Island (Private).....	.....	18	.....	.....	18	
Long Island (Private).....	.....	6	.....	.....	6	
Thompson's Island (Private).....	.....	2	.....	.....	2	
Rainsford Island (Private).....	.....	1	3	1*	5	*1 not for fire.
Gallop's Island (Private).....	.....	1	.....	1*	2	*1 not for fire.
Brookline.....	5	.....	.....	3	8	
Chelsea.....	.....	.....	.....	7	7	
Quincy.....	.....	11	.....	.....	11	
Total Number, Public Hydrants.....	2,721	2,915	768	664	7,068	
Total Number, Private and Suburban Hydrants.....	30	126	5	139	300	

NOTE.—The salt water hydrants are not included in above as they are not connected with our system.

Water Posts.

DISTRICT.	Number in use Jan. 31, 1898.	Established during the Year.	Abandoned during the Year.	Number in use Jan. 31, 1899.
City Proper	55	16	1	70
South Boston.....	28	7	.....	35
East Boston.....	32	8	.....	40
Roxbury	69	6	1	74
Dorchester	83	14	8	89
West Roxbury.....	76	4	3	77
Brighton	45	5	.....	50
Charlestown.....	20	.....	.....	20
Totals	408	60	13	455

Causes of Repairs on Pipes of all Sizes.

Abolishment of grade crossings	12
Blasting	43
Broken by pile-driver	1
Broken by steam-roller	10
Broken in foundation wall	34
Defective couplings	29
Defective joints	159
Defective pipes	71
Defective packing	144
Defective stop-cocks	196
Eaten by soil	16
Frozen	57
Gnawed by rats	9
In way of various corporations	129
Main cocks renewed	167
New sidewalk cocks put in	6
New main uprights put on	70
On account of Sewer Department	89
Pipe stolen	1
Settling of earth	415
Sidewalk cocks renewed	311
Sidewalk uprights raised or lowered	381
Sidewalk uprights moved on account of edgestone	51
Stopped by dirt	101
Stopped by fish	176
Stopped by gasket	11
Stopped by rust	566
Struck by pick	129
Widening of streets	37
Worn out	11

3,432

**Statement of Miscellaneous Work Performed during the
Year 1898.**

Boxes over bridges repaired	40
Dead ends blown off	1,247
Examinations caused by false reports	894
Fountains repaired	252
Gates salted on account of cold weather	7,220
Gates inspected	16,250
Gates oiled and cleaned in service	219
Hydrant barrels changed for repairs	235
Hydrant boxes repaired in service	515
Hydrant boxes renewed	110
Hydrant boxes cleaned out	2,269
Hydrant inspections made on account of cold weather	150,181
Hydrants oiled in service	952
Hydrants painted	2,610
Hydrants repaired in service	323
Leaks found inside building line for owner to repair	356
Locations of gates marked and remarked	8,791
Meter boxes repaired in service	12
Putting hay in hydrant boxes	537
Stop-cock or gate boxes repaired in service	824
Stop-cock or gate boxes renewed in service	291
Streets repaired	1,463
Taking hay out of hydrant boxes	594
Taking hay out of meter boxes	893
Water posts repaired	979
Water turned on and off for repairs	244

Number of Repairs Made on Pipes of all Sizes from 1850 to 1898.

Year.	Number.	Year.	Number.
1850	104	1875.....	928
1851	237	1876.....	948
1852	323	1877.....	910
1853	345	1878.....	1,237
1854	354	1879.....	1,206
1855	294	1880.....	1,064
1856	307	1881.....	1,028
1857	363	1882.....	1,418
1858	311	1883.....	953
1859	531	1884.....	1,380
1860	592	1885.....	749
1861	508	1886.....	875
1862	490	1887.....	1,041
1863	494	1888.....	1,356
1864	489	1889.....	1,032
1865	607	1890.....	898
1866	675	1891.....	952
1867	609	1892.....	1,444
1868	531	1893.....	1,882
1869	489	1894.....	1,703
1870	864	1895.....	1,535
1871	1,565	1896.....	2,796
1872	1,647	1897.....	2,781
1873	1,229	1898.....	3,432
1874	2,594		

DRINKING FOUNTAINS.

Number, Style, Location.

(a) Indicates automatic fixtures for man and beast in warm weather, and a continuous flow of water for beasts in cold weather.

(b) Indicates automatic fixtures for beasts only. Continuous flow of water all the year.

(c) Indicates automatic fixtures for man in warm weather only.

(d) Indicates automatic fixtures for man and beast in warm weather only.

(e) Indicates cold water fountains with automatic fixtures for man in warm weather only.

City Proper.

43 a — Albany street, at Union Park street.

42 a — Albany street, at Lehigh street.

47 a — Albany street, opposite Concord street.

27 a — Atlantic avenue, at Rowe's wharf.

25 a — Atlantic avenue, junction Commercial street.

40 a — Beacon street, corner Charles street.

51 b — Beacon street, junction Commonwealth avenue.

- 36 c — Boston Common, corner Beacon and Charles streets.
- 35 c — Boston Common (Park square).
- 33 c — Boston Common (near old elm).
- 32 c — Boston Common (West street).
- 34 c — Boston Common (near band stand).
- 31 e — Boston Common (corner Park and Tremont streets).
- 38 e — Bowdoin square.
- 21 c — Causeway street, at Union Station.
- 22 a — Causeway street, junction Merrimac street.
- 39 a — Charles street, between Beacon and Boylston streets.
- 41 a — Columbus avenue, opposite Church street.
- 96 c — Copp's Hill terrace, opposite Charter street, North End park.
- 26 b — Custom House square.
- 29 a — Fort Hill square.
- 24 a — Haymarket square.
- 37 e — Hanover street, opposite Police Station No. 1.
- 23 a — Leverett street, at Craigie's bridge.
- 44 a — Malden Street, junction Wareham street.
- 50 a — Massachusetts avenue, near Westland avenue.
- 20 c — North End park, at men's bath-house.
- 18 e — North End park, at women's bath-house.
- 19 e — North End park, rear band-stand.
- 28 b — Post Office square.
- 45 a — Tremont street, at Clarendon street.
- 46 a — Washington street, at Blackstone square.
- 95 c — Washington street, at State street.
- 30 a — Winthrop square.

East Boston.

- 12 b — Bennington street, junction Chelsea street.
- 14 b — Central square.
- 16 c — Lewis street, at Webster street.
- 94 e — 120 Marginal street.
- 15 b — Maverick square.
- 17 c — Maverick street, corner Cottage street.
- 11 c — Neptune road, at Wood Island Park.
- 13 c — Prescott street, at Bennington street.
- 10 c — Saratoga street, junction Pope street.
- 9 b — Square at Winthrop junction.

South Boston.

- 74 a — A street, near First street.
- 81 b — Andrews square.
- 82 c — Andrews square.
- 73 d — Foundry street, opposite First street.
- 75 c — Fourth street, corner Dorchester street.
- 77 a — Fourth street, junction Emerson street.

- 78 a — Independence square.
- 80 c — Q street, at Fifth street.
- 79 c — Sixth street, near P street.
- 76 c — Thomas park.

Roxbury.

- 48 a — Albany street, junction Dearborn street.
- 55 a — Columbus avenue, near Whittier street.
- 59 c — Dale street, near Bainbridge street.
- 53 c — Eliot square.
- 52 b — Eliot square.
- 49 a — Eustis street, junction Washington street.
- 60 a — Heath street, at Huntington avenue.
- 57 a — Junction Columbus avenue and Centre street.
- 56 a — Hanley square (Columbus avenue, opposite Roxbury street).
- 54 a — Tremont street, junction Cabot street.
- 58 a — Walnut avenue, opposite Circuit street.

West Roxbury.

- 61 a — Centre street, junction Day and Perkins streets.
- 62 a — Centre street, junction South street.
- 66 a — Centre street, opposite Spring street.
- 63 d — South street, junction Morton street.
- 65 a — Washington street, junction South st.
- 64 b — Washington street, opposite Forest Hills Station.

Brighton.

- 68 a — Barry's corner.
- 72 c — Beacon street, opposite Chestnut Hill Reservoir.
- 71 a — Market street, Cattle Fair Hotel.
- 67 a — Union square.
- 69 a — Western avenue, Charles River Hotel.
- 70 a — Washington street, at Oak square.

Dorchester.

- 88 a — Adams street, opposite Minot street.
- 93 a — Blue Hill avenue, junction Washington street.
- 92 d — Blue Hill avenue, opposite Franklin park.
- 84 b — Eaton square (granite bowl).
- 86 a — Freeport street, opposite Beach street.
- 85 a — Glover's corner.
- 91 a — Junction Washington, Centre, Norfolk streets and Talbot avenue.
- 87 a — Neponset avenue, opposite Walnut street.
- 89 a — Pierce square (Milton Lower Mills).
- 90 b — River street, junction Blue Hill avenue.
- 83 a — Upham's corner.

Charlestown.

- 5 d— Austin street, near Main street.
- 7 d— Chelsea street, opposite Mystic playgrounds.
- 8 e— City square.
- 6 e— Junction Vine and Bunker Hill streets.
- 4 a— Rutherford avenue, at Dunstable street.
- 1 b— Sullivan square.
- 3 c— Sullivan square.
- 2 e— Sullivan square.

APPENDIX D.

REPORT OF THE ENGINEER.

ENGINEERING DEPARTMENT,

50 CITY HALL, February 1, 1899.

HON. JOHN R. MURPHY,

Water Commissioner:

SIR,—I hereby submit the following report of the work done and records kept during the past year:

On January 1, 1898, the Metropolitan Water Board, under the provisions of chapter 488 of the Acts of 1895, made takings of the entire Boston Water Works system westward of Chestnut Hill Reservoir; of Chestnut Hill Reservoir and that part of the adjoining lands included within the road encircling the reservoir; of Chestnut Hill Pumping Station and a portion of the land easterly of the Pumping Station; of the Mystic system west of and including Mystic Reservoir on College Hill, Medford, and a portion of the mains of the Mystic System. On the same date water from the Metropolitan System was supplied to the City of Boston, and Mystic Lake as a source of water supply was abandoned. On April 21, 1898, the Metropolitan High Service was supplied to East Boston, and the local pumping station was abandoned. On February 1, 1899, the Metropolitan Water Board began the operation of the pumping station, supplying the double high service in West Roxbury.

DISTRIBUTION.

During the past year 33.6 miles of water pipes were laid and 9.1 miles were abandoned, making a total of 689.2 miles; this total length includes mains belonging to the city of Boston only, and does not include the systems of Chelsea, Somerville and Everett, and that portion of the Boston system acquired by the Metropolitan Water Board, all of which were formerly included in the reports of the City Engineer under the heads of Cochituate and Mystic Divisions.

The changed conditions occasioned by the Metropolitan supply caused some anxiety in regard to the safety during the winter season of the large mains supplying Charlestown and of those over Warren bridge; where formerly a well defined current had existed it was thought that the present slow movement of water in the pipes might be insufficient to prevent freezing, and some of the lines were shut off and emptied during the cold weather. Daily determinations were made of the temperature of the water in all mains where danger was supposed to exist and thermophone readings were taken in the bottoms of siphons on lines that had been emptied. These readings were plotted daily and afforded opportunity for careful study of the existing conditions. When the readings became dangerously low, means were taken to increase the circulation in the pipe in danger.

The year has been an active one, as the record of pipe laid shows; for all work done plans have been made and lines and grades have been furnished where necessary.

The Dorchester high service line was completed to Washington street, via Geneva avenue and Bowdoin street, at Columbia road, the size being reduced to 30 inches; connections were made with 24-inch and 16-inch lines in Columbia road, with a 12-inch line in Bowdoin street and with a 12-inch line in Washington street. The 36-inch pipe in Geneva avenue from Grove Hall to Columbia road was laid under contract by H. P. Nawn.

The 24-inch high service in West Roxbury was extended from Forest Hills through South street to the Arnold Arboretum, and thence through Weld street to South street, connecting with the 8-inch line in Weld street and the 16-inch in Roberts street; sufficient increase of pressure resulted from this extension to allow the Skinner Hill district to be taken off the supplementary high service.

A large amount of work was done in Columbia road; new service mains were laid on each side of the road for practically the entire distance from Blue Hill avenue to Edward Everett square; a 24-inch high service main was laid (with the exception of a gap at the New York, New Haven & Hartford Railroad) from Geneva avenue easterly; at Quincy street it reduces to 20-inch and so continues to Upham's Corner. A large portion of the 20-inch and 16-inch mains were relaid from Upham's Corner to Edward Everett square.

In Roberts street a 16-inch main was laid, designed for future extension easterly to Dorchester.

In South Boston the 20-inch low service main was carried to City Point by way of Dorchester and Third streets, giving

an abundant supply of water for fire purposes in a district where the protection had been inadequate. Connections were made with the pipes in Dorchester, L., P. and Q. streets.

The water supply at Thompson's, Long, Rainsford's and Galloup's Islands and at Fort Warren has been unsatisfactory for several years; this fact, added to the possibility of the batteries on Long Island and Fort Warren being called upon for service against a Spanish fleet, called for prompt action, and a 16-inch pipe was laid in Ashmont street and Neponset avenue to the Neponset River, replacing a 12-inch pipe, and a 12-inch was laid from the river to Moon Island in addition to the 6-inch in service. A connection was also made with the Quincy system on Hancock street for use in an emergency.

The most important piece of relaying was on Harrison avenue, where the old 6-inch pipe was replaced with a 12-inch from West Newton street to Massachusetts avenue and with a 16-inch from Massachusetts avenue to Vernon street.

In all 8.0 miles of old and small pipe have been relaid.

It is the practice of the Street Department to notify the different departments of the city of its intention to build or rebuild streets; in all cases the pipes, hydrants, etc., upon such streets were adjusted. This practice caused a large amount of work, particularly in the city proper.

During the year an effort has been made to abolish "dead ends" with a resulting improvement both in the domestic and fire service. One hundred and fifty Boston hydrants have been taken out. In this connection I would urgently recommend the adoption of an independent valve post hydrant with two large steamer outlets running parallel with the line of the street. Such a hydrant would prove much better adapted to the needs of the Fire Department than the type of post hydrant in service.

THE CORROSION OF PIPES BY ELECTROLYSIS.

There has been no marked change in electrical conditions in the water pipes during the past year. Serious damage from electrolysis is undoubtedly a possibility and safety can be hoped for only through systematic and continued investigation. The protective measures employed in the past have in a measure proved effectual; yet it is very possible that more radical steps must be taken in the near future to guard against disaster. The subject has been carefully studied during the year by Messrs. Stone & Webster, by whom many observations were made throughout the city. The following is their report:

STONE & WEBSTER, ELECTRICAL EXPERTS AND ENGINEERS,
4 POST OFFICE SQUARE, BOSTON, February 1, 1899.

WILLIAM JACKSON ESQ.,

City Engineer, Boston, Mass.:

DEAR SIR, — At your request we have made during 1898, as in previous years, electrical surveys in all parts of the city of Boston covered by the electric car tracks, in order to determine the progress of electrolytic corrosion of water pipes.

Heretofore we have relied upon readings taken between the water pipes (at fire hydrants) and the ground as the most accurate index to the locality of trouble. In 1897 we also took readings between hydrants and rails, but used only the hydrant-to-ground readings in comparing the conditions of 1897 with those of 1896. In 1898, however, we confined ourselves almost entirely to readings between hydrants and rails, as we believe them more reliable for studying the situation as a whole. For particular localities, as in the neighborhood of Freeport street power station, we took ground readings also.

In other cities we have obtained hydrant-to-rail measurements in investigations made during the year, and find the only objection to the method is that the size of the single reading is not always a criterion of the amount flowing between the points at which the measurement is made. Very reliable data can, however, be obtained if hydrant-to-rail measurements are made in connection with other readings in the same locality, taken under various conditions. The objection to the hydrant-to-ground system, formerly used, is that the readings vary with the condition of the soil and are therefore not as trustworthy for general comparison, as hydrant-to-rail readings.

In diagram I. we give the maximum value of readings taken between hydrants and rails. On this diagram we have divided the city into convenient sections, shown by the red lines. The figures in red give the average voltage throughout the various sections for 1897 and 1898. The plus readings (indicated by + sign) show that the current flows from pipes to rails, the minus readings (indicated by O) show the reverse. As might be expected, many of the readings are fluctuating, and are so indicated on the diagram by a cross within a circle. Where no number accompanies a cross or a circle the reading was less than one quarter ($\frac{1}{4}$) of a volt. We have recorded on the diagram readings of one quarter ($\frac{1}{4}$) of a volt and up to three quarters ($\frac{3}{4}$) as if they were one half ($\frac{1}{2}$) volt, and readings of three quarters ($\frac{3}{4}$) up to one and one quarter ($1\frac{1}{4}$) as if they were one (1) volt; and so

with still higher readings; that is, we have recorded the nearest even half ($\frac{1}{2}$) volt, our purpose being to simplify the figures and make it easy to compare them, extreme accuracy being neither essential nor possible in an investigation of this kind. We have not given the readings where they were sometimes positive and sometimes negative. Readings were taken between pipes and ground in the neighborhood of the Dorchester power station (*i.e.*, on Freeport and Park streets). These are not given on the diagram, but only the signs indicating the direction of the flow of the current.

It will be seen that on the average the conditions for the past two years have been about the same, the difference being slightly in favor of 1897. The general averages are as follows:

Av. positive readings, 1898	+1.4	Av. negative readings, 1898	-1.4
“ “ “ 1897	+1.3	“ “ “ 1897	-1.2

We wish to call attention to the positive readings along Dorchester and Neponset avenues and also along Harrison avenue, and to the negative readings along Centre street, near the Roxbury boundary, as well as along Centre street in the West Roxbury and Roslindale loop, and also on Bunker Hill street in Charlestown.

Large positive readings as shown at the former places indicate that much current is flowing off the pipes to the rails. This flow will be only increased by improving the rail-return system in a district where the readings are positive. The source of trouble will be found at some point more or less distant, where the track-return system is insufficient, so that the current leaves the tracks, seeking a path of less resistance by the pipes. Therefore, in a “positive” district the only direct remedy that can be applied is to make the piping system itself a better conductor so as to keep the current from leaving it and flowing through the earth to the rails. This remedy, however, should be considered as only a temporary expedient since it causes a large flow of current through the pipes, thus exposing them to an added danger of corrosion at the joints wherever the electrical connection is imperfect. It may, however, be resorted to in cases where the real source of trouble cannot be immediately located and where the continual passage of current from pipes to ground is causing deterioration.

With this in mind we advised bonding the water main to the return feeder in the power station on Freeport street, and also to the underground return feeder near by on Park







street. These connections were made November last. Before we can be certain that similar connections should be made on Harrison avenue or the Central Power Station district, the results of the bonding in the Dorchester district will have to be carefully studied.

Large negative readings, as observed in some of the sections above mentioned, indicate that considerable current is flowing on to the water pipes. In these sections better bonding, or a more effective return conductor of some sort, should be provided.

On diagram II. are shown the readings taken in the outskirts of the city between hydrants of the Boston system and those of adjacent places. We spoke in our last report of the advisability of making a special study of this current flowing across the border of the city. We have found a greater tendency to flow off the Boston pipes in 1898 than in 1897. The detail results of the 1898 test are shown on Diagram II. We expect to give this matter more particular attention and hope to be in a position to submit a more definite report with regard to it during the coming year.

For the purpose of investigating the general efficiency of the rail-bonding we took several readings along sections of track from 1000 to 1800 feet in length, and the figures given on the diagram show the fall of potential per 100 feet as computed from the data obtained. There was no indication of very defective rail-bonding thus revealed, but the readings will be of use in giving a standard for comparison on other occasions. The variations in the figures are largely due to varying numbers of cars in the different sections of the street railway system.

We reported last year that the underground return-feeder system of the Dorchester District threatened to cause trouble in the service pipes before long, and our investigations since then tend to confirm this opinion. Our attention was called on March 21 of this year to a broken service on Park street, and examination shows that electrolysis is undoubtedly the cause of the break. A section of the pipe has been returned and is kept for exhibit. The readings between this pipe and the ground were as high as $\frac{4}{10}$ of a volt, which is unusual for a ground reading.

In general we think there is much likelihood that electrolytic corrosion is going on in the two danger districts above mentioned and to a smaller degree in one or two other places where positive readings are shown. Another place in particular to which we would call attention is on Hyde Park avenue between Walk Hill street and Forest Hills station.

Careful watch should be kept of all localities where trouble is indicated lest the conditions change for the worse. Occasional bursting of pipes from single leaks is not to be feared so much as the continual wasting that may go on from current escaping over large sections.

Yours very truly,

(Signed) STONE & WEBSTER.

SALT-WATER FIRE SYSTEM.

A salt-water system for fire protection was established under a special appropriation granted to the Fire Department. It consists of a 12-inch pipe, extending from Central Wharf through Central and Exchange streets, Post-office square and Congress street to Congress street bridge, a total distance of about one mile. At Central Wharf the line divides into two 10-inch pipes, to each of which is attached a special casting, fitted with six $3\frac{1}{2}$ -inch outlets, with check valves on each outlet. This design enables one or both fireboats to connect with the pipe through lines of $3\frac{1}{2}$ -inch hose, varying in length from fifteen to thirty feet. A similar boat connection will be established at Congress-street bridge.

With the exception of a short exposed piece of pipe at each end of the line the system is maintained full of water from a check-valve to Central Wharf to a similar valve at Congress-street bridge, pressure being maintained up to check-valves and to foot-valves of hydrants by means of a 1-inch pipe connecting with a tank in the Post-office building, which is fed directly from the city mains. Check-valves in this connecting pipe close when fire pressure exceeds the ordinary domestic pressure.

Six-inch relief valves are set on the main pipe to prevent the maximum pressure exceeding 200 pounds per square inch. In service, when the first hose connection has been made between the fireboat and the end of the pipe, the former can begin to pump slowly, expelling the air from the empty end near the boat through an air-cock provided for the purpose. When the requisite number of connections have been made, the air has been driven out and the boat is ready to respond to a signal from a hydrant to "go ahead." Hydrants are established about 300 feet apart, each gated off from the main line. The hydrant used was the Bachelder (so called from the name of the inventor and patentee, E. J. Bachelder, master mechanic of the Boston Water Department). It is a post hydrant of unusually heavy design, with three 3-inch outlets,

each controlled by an independent valve. The waste is positive and is operated by a wrench from the street surface. A hole is cored out in the side of the hydrant for an electric cable, terminating in a recess at the top, forming a signal-box, thus affording means of electrical connection in the hydrant itself and avoiding the necessity of an independent post for that purpose.

The pipe used was cast-iron, of the general Boston Water Works pattern, with the innovation of two lead scores in the bell. It was unusually heavy, being one inch thick, and weighing 1,704 pounds per length laying twelve feet.

Owing to the fact that the system was to be kept full of salt water it was decided that the ordinary type of valves built of iron and composition were not suitable, as a destructive galvanic action would result. The valves adopted were of composition throughout, with flanged ends, and were separated from the adjoining cast-iron pipes by heavy rings of pure rubber. The precautions taken in the case of the hydrants, which are empty when not in use, were to separate the composition valve-seat from the iron hydrant-pot by a lead joint, also to protect the end of the iron valve stem by a composition cap, making a tight joint with the rubber-foot valve.

An electrical duct, laid in the main pipe trench, carries a five conductor cable with connections to each hydrant; two of these conductors are utilized, forming part of the regular electrical system of the Fire Department. Each hydrant is equipped with a break key, whereby the code signals can be transmitted to the fireboat; portable instruments, consisting of Morse key and sounder, can also be connected into circuit at all hydrants and boat stations; thus, communication is possible at will between the hydrants, boat stations and central office. Two of these portable instruments are carried on each fireboat, for use at the boat and at the hydrant in service.

A trial made at a distance of one-half mile from the water front, with one boat in service, conclusively proved that the system is a valuable addition to the equipment of the Fire Department; with an unlimited water supply and with a nominal pumping capacity of 6,000 gallons per minute when one fireboat is in service, or double that amount when both boats are used, the system can be depended upon to furnish a number of streams equal in power to those from the largest "Steamers," and, when necessary, streams of unusual power are available, *e.g.*, at the trial mentioned two streams each of 1,500 gallons per minute were played simultaneously through

2½-inch nozzles with a nozzle pressure of fifty pounds; three lines of 3-inch hose, each 300 feet long, were siamezed in this test.

All the work of establishing the salt-water system was done by the Water Department, with the exception of the electrical service, which was installed by the Fire Department.

Yours respectfully,

WILLIAM JACKSON,
City Engineer.

SALT WATER FIRE-PIPE TEST, NOVEMBER 13, 1898.

Experiment Diagram.	Experiment Index.	Elapsed Time.	LINE NO. 1.					LINE NO. 2.					LINE NO. 3.					LINE NO. 4.					LINE NO. 5.					LINE NO. 6.					REMARKS.			
			Length of Hose.	Diam. of Hose.	Diam. of Nozzle.	Indicated Pressure at Nozzle.	Discharge per Minute.	Length of Hose.	Diam. of Hose.	Diam. of Nozzle.	Indicated Pressure at Nozzle.	Discharge per Minute.	Length of Hose.	Diam. of Hose.	Diam. of Nozzle.	Indicated Pressure at Nozzle.	Discharge per Minute.	Length of Hose.	Diam. of Hose.	Diam. of Nozzle.	Indicated Pressure at Nozzle.	Discharge per Minute.	Length of Hose.	Diam. of Hose.	Diam. of Nozzle.	Indicated Pressure at Nozzle.	Discharge per Minute.	Length of Hose.	Diam. of Hose.	Diam. of Nozzle.	Indicated Pressure at Nozzle.	Discharge per Minute.		Total Discharge per Minute.	Pressure of Hydrant Outlet, Line No. 1.	Loss of Pressure in Hose, Line No. 1, corrected.	Loss of Pressure per 100' of Hose under given Discharge.
H.M.S.	H.M.S.	M.S.	Ft.	In.	In.	Lbs.	Gal.	Ft.	In.	In.	Lbs.	Gal.	Ft.	In.	In.	Lbs.	Gal.	Ft.	In.	In.	Lbs.	Gal.	Ft.	In.	In.	Lbs.	Gal.	Ft.	In.	In.	Lbs.	Gal.	Lbs.	Lbs.	Lbs.	
10.27.30			150	3	1½			150	3	1½			150	3	1½																				Pumps started at 10.27.30.	
10.28.00	10.28.30	0.30	"	"	"	44.3	827	"	"	"	45.3	817	"	"	"	44.5	811	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1,855	109.0	63.7	43.0
10.29.00	10.29.00	0.30	"	"	"	50.9	799	"	"	"	51.8	690	"	"	"	50.3	691	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1,979	126.0	75.0	50.0
10.29.30	10.30.00	1.00	"	"	"	55.6	703	"	"	"	56.1	687	"	"	"	55.0	680	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2,070	134.5	77.9	52.6
10.30.00	10.31.00	1.00	"	"	"	57.7	716	"	"	"	58.1	699	"	"	"	57.0	698	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2,108	138.5	79.8	53.0
10.31.00	10.31.30	0.30																																		
10.31.30	10.32.00	0.30	150	3	1½	43.5	664	150	3	1½	51.3	637	150	3	1½	50.0	648	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1,969			Shut down.
10.32.00	10.32.30	0.30	"	"	"	54.6	693	"	"	"	55.3	689	"	"	"	54.5	677	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2,062			
10.32.30	10.33.00	1.00	"	"	"	57.0	719	"	"	"	58.3	700	"	"	"	57.0	698	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2,106			
10.33.30	10.40.00	6.30	"	"	"	58.8	734	"	"	"	59.6	706	"	"	"	57.5	696	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2,128			
10.40.00	10.41.30	1.30	"	"	"	60.0	732	"	"	"	61.8	721	"	"	"	58.1	699	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2,152			
10.41.30	11.11.30																																		Shut down at 10.41.30.	
11.11.30			300	3	1½			300	3	1½			300	3	1½			300	3	1½			300	3	1½			300	3	1½					Changing hose lines and nozzles.	
11.12.00	11.13.00	1.00	"	"	"	73.6	400	"	"	"	70.7	387	"	"	"	73.6	392	"	"	"	"	73.6	392	"	"	388	"	"	"	"	388	2,306	139.0	51.5	17.3	
11.13.00	11.14.00	1.00	"	"	"	86.3	429	"	"	"	82.0	417	"	"	"	85.2	425	"	"	"	"	84.4	423	"	"	424	"	"	"	"	424	2,543	140.0	53.3	17.4	
11.14.00	11.15.00	1.00	"	"	"	98.5	445	"	"	"	88.8	434	"	"	"	83.9	446	"	"	"	"	93.0	444	"	"	442	"	"	"	"	442	2,633	147.7	53.3	17.7	
11.15.00	11.17.00	2.00	"	"	"	100.0	459	"	"	"	94.8	448	"	"	"	101.3	463	"	"	"	"	98.7	457	"	"	457	"	"	"	"	457	2,741	157.8	62.8	17.6	
11.17.00	11.19.30	1.30	"	"	"	102.3	465	"	"	"	97.8	455	"	"	"	104.8	471	"	"	"	"	101.3	463	"	"	464	"	"	"	"	464	2,782	157.0	63.8	17.9	
11.19.30	11.21.00	1.30	"	"	"	104.4	470	"	"	"	103.2	472	"	"	"	106.1	481	"	"	"	"															
11.21.00	11.21.00	1.30						"	"	"	111.0	485	"	"	"	120.9	506	"	"	"	"														Shut down at 11.21.00.	
11.21.00	11.33.30																																		Changing nozzles.	
11.33.30			300	3		Stamed with lines 2 and 3		300	3	2			300	3		Stamed with lines 1 and 2		300	3	2			300	3		Stamed with lines 4 and 6		300	3		Stamed with lines 4 and 5				Pumps started at 11.33.30.	
11.36.00	11.38.30	0.30	"	"	"			"	"	"	81.5	1,105	"	"	"			76.3	1,070	"	"			88.8	1,135	"	"					2,175	134.5	82.0		
11.38.30	11.39.00	1.30	"	"	"			"	"	"	89.3	1,138	"	"	"			88.8	1,135	"	"			88.8	1,135	"	"					2,296	148.3	86.0		
11.39.00	11.41.30	2.30	"	"	"			"	"	"	91.0	1,170	"	"	"			91.5	1,173	"	"			91.5	1,173	"	"					2,383	151.5	89.5		
11.41.30	11.49.00							"	"	"	94.6	1,139	"	"	"			91.5	1,173	"	"			91.5	1,173	"	"					2,365	156.9	61.3		
11.49.00			300	3		Stamed with lines 2 and 3		300	3	2½			300	3		Stamed with lines 1 and 2		300	3	2½			300	3		Stamed with lines 4 and 5		300	3		Stamed with lines 4 and 6				Shut down at 11.41.30.	
11.49.00	11.50.00	1.00	"	"	"			"	"	"	46.5	1,091	"	"	"			56.2	1,205	"	"			56.2	1,205	"	"					2,506			Changing nozzles.	
11.50.00	11.50.30	0.30	"	"	"			"	"	"	53.7	1,108	"	"	"			60.2	1,247	"	"			60.2	1,247	"	"					2,445	138.5	71.8		
11.50.30	11.51.00	0.30	"	"	"			"	"	"	60.6	1,251	"	"	"			65.3	1,268	"	"			65.3	1,268	"	"					2,549	136.7	75.1		
11.51.00	11.52.00	1.00	"	"	"			"	"	"	63.5	1,280	"	"	"			66.7	1,313	"	"			66.7	1,313	"	"					2,636	143.0	78.5		
11.52.00	11.54.00	2.00	"	"	"			"	"	"	66.0	1,305	"	"	"			68.6	1,331	"	"			68.6	1,331	"	"					2,636	148.2	81.3		
11.54.00	11.55.30																																		Shut down at 11.54.00.	
11.55.30			300	3		Stamed with lines 2 and 3		300	3	2½			300	3		Stamed with lines 1 and 2		300	3	2½			300	3		Stamed with lines 4 and 5		300	3		Stamed with lines 4 and 6				Pumps started at 11.55.30.	
11.56.00	11.56.30	0.30	"	"	"			"	"	"	39.6	1,317	"	"	"					"	"											119.5	78.9			
11.56.30	11.57.30	1.00	"	"	"			"	"	"	43.8	1,388	"	"	"			47.4	1,439	"	"			47.4	1,439	"	"					2,821	125.0	83.3		
11.57.30	11.59.00	1.30	"	"	"			"	"	"	47.6	1,442	"	"	"			50.0	1,480	"	"			50.0	1,480	"	"					2,922	140.7	92.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"	"			51.0	1,498	"	"					2,955	145.0	93.1		
11.59.00	12.00.00	1.00	"	"	"			"	"	"	48.8	1,462	"	"	"			51.0	1,498	"																

Lines 1, 2 and 3, from hydrant at Post Office square.

Lines 4, 5 and 6, from hydrant on Congress street, near Milk street.

In the last three sets of experiments, two Eastman Sets were used with three lines from each hydrant. Each Eastman Set includes 16 feet of 3½-inch hose.

In the set of experiments with six 1½-inch nozzles, the discharge from Lines Nos. 5 and 6 is approximate, as no pressures were taken at the nozzles, therefore the total discharge for this set of experiments is approximate.

GENERAL STATISTICS.

BOSTON WATER DEPARTMENT.

Daily average amount used through meters, gallons	15,717,100
Number of services	84,114
Number of meters and motors	4,865
Length of supply and distributing mains, in miles	689.2
Number of public fire-hydrants in use	7,068
Yearly revenue from water-rates	\$2,318,296 74
Yearly revenue from metered water	\$909,196 35
Percentage of total revenue from metered water, ...	39.2
Yearly expense of maintenance	\$543,390 77

Average Maximum and Minimum Monthly and Yearly Heights, in Feet, Above City Base, to which Water would Rise at Different Stations on the Boston Water Works.

1898.	Boston Common.		Engine-house No. 2, Salem Street.		Engine-house No. 7, East Street.		Engine-house No. 33, Congress Street, Boston.		Engine-house No. 2, Fourth Street, South Boston.		Engine-house No. 9, East Street, East Boston.		Engine-house No. 16, River Street, Dorchester.		Engine-house No. 32, Banker Hill Street, Charlestown.		710 Albany Street.		Engine-house No. 18, Harvard Street, Dorchester.		City Hall High Service.		Engine-house No. 24, Quincy Street, High Service.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
January ..	121.0	103.9	123.1	103.7	121.4	103.6	119.9	102.4	119.9	99.9	115.7	89.4	121.4	102.7	154.8	147.0	123.0	106.4	236.5	204.7	249.2	241.3	239.8	217.7
February..	120.9	102.5	124.0	103.5	120.5	103.1	119.7	102.1	119.0	99.0	115.9	90.1	120.5	101.6	153.9	149.0	121.1	105.6	234.8	210.5	248.2	241.2	239.2	221.2
March.....	125.8	105.8	127.7	106.6	125.2	106.1	124.6	104.8	125.2	103.2	121.6	93.8	126.0	105.2	154.9	150.4	125.9	108.6	239.8	213.5	251.2	244.7	242.3	222.7
April	127.8	110.0	127.0	109.7	126.3	109.6	125.8	109.3	126.8	106.1	125.0	100.0	126.7	108.5	153.6	148.6	127.6	112.4	240.2	211.7	251.6	244.4	242.6	222.1
May	128.7	111.3	127.9	109.1	126.9	109.8	126.6	108.4	127.7	106.0	155.2	147.0	127.9	108.8	154.5	151.3	128.2	112.0	246.7	232.4	251.3	245.1	248.5	240.9
June	128.9	110.9	127.9	108.2	127.3	109.4	125.9	107.6	127.8	105.4	155.0	146.4	127.8	107.7	154.9	151.9	128.0	111.6	247.0	229.5	251.9	245.4	248.3	240.6
July	128.8	110.6	127.6	108.0	.....	.....	126.0	108.0	127.0	104.1	155.1	145.3	127.5	107.7	156.1	152.1	127.8	111.9	245.8	229.8	251.4	247.0	248.1	240.8
August....	128.4	110.1	128.6	107.6	.....	.....	125.7	107.1	126.3	102.7	154.0	143.6	127.0	106.6	155.6	151.7	127.4	110.3	245.5	230.3	250.6	246.2	247.6	241.4
September.	128.7	109.7	128.9	109.3	.....	.....	126.0	106.9	127.2	104.3	154.6	144.6	127.5	106.4	155.7	151.6	127.4	110.9	245.2	227.1	250.1	246.0	246.5	238.7
October....	129.2	113.0	129.6	111.7	128.3	111.4	126.5	110.0	127.7	107.5	155.1	145.5	128.1	109.8	155.2	151.9	127.7	113.1	246.6	233.2	250.8	246.0	247.1	239.9
November.	129.3	113.5	129.6	112.3	128.7	113.3	127.0	111.5	128.1	109.0	154.4	146.2	129.4	111.5	154.4	152.0	127.8	114.1	.....	.....	250.6	246.3	248.4	242.0
December.	126.0	110.3	126.1	112.3	126.3	110.0	125.0	108.7	124.8	105.4	151.0	141.3	126.0	108.0	152.1	147.2	125.7	111.0	.....	.....	250.7	246.5	248.4	243.2
Averages.	127.0	109.3	127.3	108.5	125.7	108.5	124.9	107.2	125.6	104.4	154.4	145.2	126.3	107.0	154.6	150.4	126.5	110.7	.....	.....	250.7	245.0	247.9	240.9

¹ On April 21, East Boston supplied from Metropolitan L. S.

² On April 26, 36-inch high service line through Roxbury turned on.

³ On January 1, Charlestown supplied by Metropolitan L. S.

*Statement of Operations at the East Boston Pumping Station for the
Year 1898.*

1898.	ENGINES NOS. 1 AND 2.				ENGINE NO. 3.				Total amount of coal consumed.	Per cent. of ashes and clinkers.
	Total pumping time.		Total amount pumped to Reservoir.	Daily average.	Total pumping time.		Total amount pumped to tank, Breed's Island.	Daily average.		
Month.	Hrs.	M.	Gallons.	Gallons.	Hrs.	M.	Gallons.	Gallons.	Lbs.	Per cent.
January.....	357	15	15,682,660	505,892	182	45	2,835,000	91,452	63,540	20.2
February....	345	45	15,103,200	539,400	172	45	2,815,680	100,560	61,670	20.3
March.....	303	15	12,375,300	399,203	175	00	2,873,040	92,678	54,870	19.5
April.....	189	45	7,609,980	380,499	170	15	2,639,280	87,976	38,600	19.5
May.....					172	00	2,392,200	77,168	20,520	19.9
June.....					183	45	2,564,400	85,480	17,110	19.6
July.....					214	30	3,169,080	102,228	19,270	19.9
August.....					185	00	2,640,840	85,189	15,970	19.2
September...					158	15	2,221,380	74,046	15,280	18.3
October.....					157	00	2,253,480	72,693	16,680	18.7
November.					153	15	2,183,100	72,770	18,300	18.5
December...					158	15	2,201,160	73,372	20,450	18.4
Totals and Averages..	1,196	....	50,771,140	457,398	2,082	45	30,788,640	84,817	362,260	19.6

On April 22 all of East Boston (except what tank supplies) supplied from Metropolitan.

*Statement of Operations at the West Roxbury Pumping Station for the
Year 1898.*

1898.	Total pumping time.		Total amount pumped.	Daily average amount pumped.	Quantity pumped per lb. of coal.	Total amount of coal consumed.	Per cent. of ashes and clinkers.	Average lift.
<i>Month.</i>	<i>Hours.</i>	<i>Min.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Lbs.</i>	<i>Per cent.</i>	<i>Feet.</i>
January...	671	00	9,517,620	307,020	181.6	52,385	17.7	154.1
February ..	595	00	8,263,928	295,140	167.2	49,400	17.9	151.3
March.....	659	00	8,598,938	277,385	171.0	50,275	16.7	148.2
April.....	631	00	8,253,563	275,118	179.5	45,975	16.5	148.3
May.....	658	00	9,367,988	302,193	188.5	49,700	16.5	143.7
June.....	697	30	9,627,901	320,930	187.3	51,400	16.7	146.1
July.....	753	00	10,455,638	337,279	175.3	59,625	16.9	147.0
August.....	694	00	10,019,738	323,217	173.4	57,800	16.4	144.1
September..	660	30	10,184,813	339,494	179.2	56,850	15.9	144.8
October	694	00	8,435,962	272,128	171.9	49,075	15.8	138.5
November..	638	00	7,322,363	244,079	180.2	40,625	15.9	131.9
December..	497	00	7,102,501	229,113	170.5	41,650	16.6	126.2
Totals and Averages,	7,848	00	107,150,953	293,564	177.2	604,760	16.6	143.7

Monthly Rainfall in Inches, during 1898, at Various Places in Eastern Massachusetts.

PLACE.	Jan.	Feb.	March.	Aprtl.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Framingham.....	6.54	4.27	2.40	4.73	3.05	2.24	3.98	7.42	2.09	7.01	7.24	3.30	54.27
Dam 4, Ashland	7.11	4.70	2.40	4.59	3.40	2.25	4.65	7.54	2.81	6.72	6.64	3.28	56.09
Cordaville	7.27	4.72	2.55	4.86	3.29	2.96	3.76	9.02	3.25	6.55	6.58	3.44	58.25
Lake Cochituate.....	6.83	4.29	2.54	5.07	3.07	2.08	3.55	7.08	3.03	6.82	6.91	3.44	54.71
Chestnut Hill Reservoir.....	5.60	5.58	2.20	6.17	4.45	2.36	5.57	6.06	1.77	7.38	7.42	2.93	57.49
Mystic Lake	5.62	5.00	2.11	6.21	3.97	2.06	5.57	7.50	2.64	7.37	6.81	3.00	57.86
Gibson street, Dorchester.....	.....	.....	.....	6.91	4.03	1.80	6.07	5.08	1.93	7.85	4.97	2.53	.....
Cambridge Observatory	4.07	5.35	2.03	5.26	3.73	1.06	4.25	7.29	1.72	6.71	6.63	2.53	51.23
Waltham, Boston Manufacturing Company.....	6.19	3.42	2.18	6.54	3.39	1.92	5.74	6.37	1.62	6.93	6.50	3.30	54.10
Lowell, Locks and Canals Company.....	4.52	7.05	1.65	5.20	3.04	3.65	2.93	8.23	1.97	6.85	6.45	2.74	54.28
Average of above ten places.....	5.97	4.93	2.23	5.55	3.54	2.30	4.61	7.22	2.28	7.02	6.62	3.05	55.36

¹ BOSTON WATER BOARD.

ORGANIZED JULY 31, 1876.

TIMOTHY T. SAWYER, from July 31, 1876, to May 5, 1879; and from May 1, 1882, to May 4, 1883.
 LEONARD R. CUTTER, from July 31, 1876, to May 4, 1883.²
 ALBERT STANWOOD, from July 31, 1876, to May 7, 1883.²
 FRANCIS THOMPSON, from May 5, 1879, to May 1, 1882.²
 WILLIAM A. SIMMONS, from May 7, 1883, to August 18, 1885.
 GEORGE M. HOBBS, from May 4, 1883, to May 4, 1885.
 JOHN G. BLAKE, from May 4, 1883, to August 18, 1885.
 WILLIAM B. SMART, from May 4, 1885, to March 18, 1889.
 HORACE T. ROCKWELL, from August 25, 1885, to April 25, 1888.
 THOMAS F. DOHERTY, from August 26, 1885, to May 5, 1890; and from May 4, 1891, to July 1, 1895.
 ROBERT GRANT, from April 25, 1888, to July 18, 1893.
 PHILIP J. DOHERTY, from March 18, 1889, to May 4, 1891.
 JOHN W. LEIGHTON, from May 5, 1890, to July 1, 1895.²
 WILLIAM S. McNARY, from August 15, 1893, to November 5, 1894.
 CHARLES W. SMITH, from January 23, 1895, to July 1, 1895.

¹ *Water Commissioners.*

CHARLES W. SMITH, from July 1, 1895, to January 20, 1896.³
 JEREMIAH J. MCCARTHY (Acting), from January 20 to February 1, 1896.
 JOHN R. MURPHY, from February 1, 1896, to present time.

Assistant Water Commissioners.

JEREMIAH J. MCCARTHY, from July 1, 1895, to January 20, 1896.
 EDWARD C. ELLIS, from February 17, 1896, to present time.

Chief Clerk and Secretary.

WALTER E. SWAN.

General Superintendent Income Division.

JOS. H. CALDWELL.

General Superintendent Distribution Division.

HUGH McNULTY.

City Engineer and Engineer of the Department.

WILLIAM JACKSON.

¹ Under Chap. 449 of the Acts of 1895, the Boston Water Board was abolished, and the Water-Supply and Water-Income Departments consolidated and placed under the charge of one Water Commissioner.

² Deceased.

³ Resigned.



ANNUAL REPORT
OF THE
WIRE DEPARTMENT
FOR THE YEAR 1898.

OFFICE OF THE COMMISSIONER OF WIRES,
OLD COURT HOUSE, BOSTON, February 1, 1899.

HON. JOSIAH QUINCY, *Mayor* :

SIR, — I respectfully submit my third annual report, being the fifth issued by the Wire Department since its organization, covering the expenses incurred and the work accomplished by it from February 1, 1898, to February 1, 1899.

In my last annual report I earnestly protested against the then existing practice of granting pole rights for the support of all classes of electric wires in the public streets and avenues, to companies and individuals seeking them, from the Board of Aldermen. Since that time, however, all applications of this kind are, together with the plans, referred to this department for examination and approval. The plans are first examined, and later the proposed location is gone over and examined by an employee of this department and a representative of the company or individual petitioning for such location. Such deviations from the plans submitted as are necessary (and there generally are very many) for the public safety and the convenience of the owners or lessees of property abutting on the streets in which such poles are to be set are made, and corresponding changes drawn on the

plans, which are kept on file for the convenience of the department and the information of the public. Two very gratifying results have been obtained by this plan, viz.: First, this office is now seldom besieged by irate citizens, who "demand why their rights are violated, the value of their property depreciated, and requesting immediate redress at the hands of the Commissioner of Wires."

Second, this department is now informed of any proposed overhead construction, and can enforce any reasonable requirements before and after it is commenced, thus saving unnecessary expense to the companies, annoyance to the abutters, and enabling it to maintain a stricter supervision over the wires supported thereon.

In justice to the corporations, it must be said that they are not always the aggressors, as there are those who do not hesitate to adopt methods that are, to say the least, questionable, to annoy them and throw obstacles in their way for purposes other than the public good.

While the situation regarding poles in the streets has greatly improved, the same cannot be said of structures on the roofs of buildings, particularly where they have been abandoned by those who erected them. Large structures for the support of electric wires, when used for that purpose, are not desirable, but when they are stripped bare of such wires they are deprived of their principal means of support, and become a source of danger, particularly to the Fire Department in case of fire.

One glaring instance of this kind occurred during the past year, when a large structure endangered the lives of the firemen, and hindered them in the prosecution of their work. The Fire Commissioner and the Chief Engineer of the Fire Department both appealed to this department to know why it permitted these unused structures to remain as a menace to the Fire Department, and as a sure means of aiding the spread of the flames when they once gained a foothold. Both of these gentlemen were surprised to find that this department was as powerless in the matter of removing said structures as was their own.

I would again renew my previous recommendation that authority be given to some department or official to remove all such unused structures.

The cry goes up from all parts of the country for more stringent building laws and better buildings, particularly after such horrors as were caused by the burning of the Windsor Hotel in New York, and others of a similar character in different parts of the country.



JAMES T. BALL, DES.

MAP SHOWING THE "UNDERGROUND TERRITORY" OF THE CITY OF BOSTON, AS PRESCRIBED BY CHAPTER 454, ACTS OF 1894, OF THE MASSACHUSETTS LEGISLATURE.



Boston has a great many first-class buildings that are classed as "fire-proof," but when thousands of feet of lumber are permitted to remain on their roofs they are nearly as unsafe as the wooden mansard roofs that contributed so much to the spread of the flames during the great conflagration that swept clean our business district in November, 1872. These solid structures, surmounted by such wooden roofs, remind one of a man wearing a fine winter suit of clothes, while his head is covered by a light straw hat. These fixtures are nearly as great a menace to the safety of the city as were the roofs above mentioned, to say nothing of the likelihood of their being blown down by the wind, or falling down during the progress of a fire.

With the close of the year 1898 underground conduits were completed, in which will be placed all the overhead wires within the district prescribed by chapter 454 of the Acts of 1894, and all the wires now remaining over the streets, with the exception of the street railway trolley wires and those of the long distance telephone, will be removed in the early spring of the year 1899.

Section 6, chapter 454, of the acts of 1894, reads as follows: "Whenever in any of the streets, avenues or other highways in said section, and those mentioned in section 4 of this act, the public interests do not, in the opinion of said commissioner, require the electrical conductors to be placed under ground, and whenever it is deemed by said commissioner upon examination to be for any cause impracticable or inexpedient for the electrical wires, cables or conductors of any person, firm or corporation to be placed or operated under ground, then and in either of those cases, it shall be the duty of said commissioner to examine and grant the application of such person, firm or corporation for permission to deviate from such underground system, subject, however, to the regulation and control of the mayor and aldermen, of the location, erection and maintenance of the poles or structures necessary to be used for sustaining such wires, cables or conductors."

Many of the owners of overhead electric wires interpreted this clause as favorable to them, and some sought to avoid compliance with the law, claiming that "the public interests did not require them to place their wires under ground;" while others in addition to this claimed exemption on the score of the great expense and the limited amount of their business.

Due consideration was given to the claims of all parties, and it was found that if the requests of all were granted the

intent and purpose of the law would be to a great extent nullified. The citizens of Boston in seeking for the passage of this law, and the Legislature in granting their request by passing it, intended that all electric wires, other than those specially exempted, should be removed from above the surface, of the streets; such exemption applied to but two classes of wires — the long distance telephone and the street railway trolley wires; the first for purely electrical reasons. The state of the art at the time of the passage of the underground act was not sufficiently advanced to permit the transmission of articulate speech over long distances on wires placed under ground; gradually, however, this difficulty is being overcome, and the time does not seem so very far removed when the static effects produced in underground cables, which has proved such an insurmountable difficulty, will be wholly eliminated or greatly reduced, so that it will be possible to place long distance telephone wires under ground.

In justice to the telephone companies it must be said that they would gladly hail any improvement that would enable them to place long distance telephone wires under ground, as recent storms resulting in the total destruction of nearly all overhead lines proves beyond a doubt the great value of underground electrical construction. Large amounts of money are being spent yearly in costly experiments with this end in view, and no doubt when the self-induction of underground cables can be wholly or in greater part overcome the long distance telephone wires and poles will disappear from the surface of our streets. Provisions have been made by the New England Telephone and Telegraph Company to place quite a large amount of long distance cable under ground, conduits having been constructed, and plans for others are completed.

An underground telephone cable has been laid and is being successfully operated between Boston and Lynn, which is the longest one of the kind I have any knowledge of. Between these two points it works successfully, and when connected to overhead lines between Lynn and Portland it operates very well; but when it is connected to lines extending to Bangor it becomes inoperative.

The expense of this cable is greatly in excess of that in ordinary use, owing to the small number of conductors that can be contained therein, as the increased amount of insulation (paper) greatly reduces the space that can be occupied by the wire. A considerable improvement has recently been made on this kind of cable, and no doubt a much longer mileage can be operated under ground in the near future.



BANK OF TRANSFORMERS ON FIXTURE ON ROOF.

Plate No. 1.

The attempt to do so will be made during the present summer.

Previous to the passage of the underground act for the city of Boston the overhead trolley was universally used for the transmission of electrical energy for the propulsion of street cars. Three small roads in Europe equipped with different systems of open-slot underground conduit containing the trolley conductors were in operation, and one short piece of road in Washington, D.C., but its success during the winter season in this climate was at that time in doubt, and inasmuch as the adoption of the open-slot system would involve an expense that could not at that time be estimated even approximately, as it would require the reconstruction of the entire roadbed, it was deemed best to permit the use of the overhead trolley in the streets of our city.

While the cost of rebuilding the track for the underground system could be accurately estimated the cost of the removal of the obstructions in the form of gas, water, sewer and other pipes, electrical conduits and other things innumerable that lay beneath the surface of the streets within the prescribed underground district, was at that time an unknown quantity. With the experience gained by this department in the construction of electrical conduits a fairly accurate estimate of the cost of such removal can now be made. Were it decided to equip that portion of the street railway in Washington street, between the North Union Station and Dover street, with the earlier type of open-slot conduit, the cost of removing the obstructions would equal the cost of the new system of roadbed that would have to be adopted. The later open-slot systems have been improved somewhat so that the depth of the excavation for the conduit is considerably less, and consequently the cost of removing obstructions not so great.

What is known as the third rail system has been adopted by the New York, New Haven & Hartford Railroad, on a portion of its Nantasket Beach branch, and also between Berlin Junction and New Britain, Conn., both of which are operating very successfully. In this system a steel rail is laid in the middle of the track which is substituted for the overhead trolley wire. As the difference of potential between this third rail and the track is 550 volts it would not be safe to use this system in the streets of any city or town; consequently, several attempts have been and are being made to overcome this obstacle and adapt the third rail system to street railways; nearly all of them are yet in the experimental stage, none that I know of having yet been adopted by any of the street railway companies. Some of these promise

well, and when their success is demonstrated the overhead trolley can be dispensed with at a reasonable cost.

The above statement answers the queries of some and the criticisms of others who question the wisdom of the Legislature, and the impartiality of this department in permitting these two classes of wires to remain overhead while all others are obliged to go under ground, the owners of many of which are much less able to make the change than the powerful telephone and street railway companies.

It can be said of the former that it needs no legislation to compel them to place their long distance wires under ground when they can be operated successfully. Over eighty per cent. of the local telephone wires were placed under ground previous to the passage of the Act of 1894, creating the Wire Department; of course the total number of wires now in use has greatly increased since that time, and all their wires for local service are now under ground within the prescribed district, while each year since and including 1894 they have placed and are now placing large amounts under ground in other sections of the city.

The Acts of 1894 did not, and the Acts of 1898 will not, compel the removal of the overhead trolley, and so long as that system of distribution of electrical energy proves satisfactory it is reasonable to suppose it will be retained. When a system is devised that is more efficient and less expensive to maintain, that can be applied at a reasonable cost, and that will not be affected by climatic conditions, no doubt the overhead trolley will be removed.

After January 1, 1900, the task of clearing twenty miles of the streets of the city of Boston will have to be undertaken. The selection of the particular streets where this work is to be done is left to the judgment of the Commissioner of Wires. But two miles in length of streets can be cleared each year up to and including the year 1910, but there is nothing to prevent companies and individuals from placing their wires under ground in any portion of the city if they desire to do so.

It will be the duty of this department to cause the removal of overhead wires from streets containing the greatest number, and where they are the most objectionable owing to their poor condition, where they offer the greatest obstruction to the Fire Department in the performance of its duties, and where they are the greatest menace to life and property. There is no doubt but what there will be much more wire removed from the streets each year than the amount stipulated by the Acts of 1898.



SAME ROOF WITH FIXTURE AND TRANSFORMERS REMOVED.

The 1898 district covered a section of the city which contained but few overhead wires as compared to the other districts of the underground section of the city, but notwithstanding that fact there was more conduit laid and more underground cable drawn into the same than was done in any one year since the organization of this department; by far the greater part of this was done outside the prescribed district by the Boston Electric Light Company and the New England Telephone and Telegraph Company. The former has constructed a new power station at the corner of L and East First streets, South Boston, where all the electrical energy necessary for its business will be generated; a large amount of wire and cable was needed to connect this station with their circuits in the city proper, and as all of it would be outside the limits of the prescribed underground district it need not be placed under ground at this time, but the company deemed it to be good business policy not to erect lines of poles and wires in the streets of South Boston, and so this added mileage of electrical conductors has been placed under their surface. In addition to these the trunk lines now leading from this company's old generating station in South Boston will be removed from above the surface of the streets very soon.

The New England Telephone and Telegraph Company has built a very large amount of conduit outside the prescribed district each year since 1894, and is likely to continue to do so. Like the Boston Electric Light Company it had very little to construct in the 1898 district, by far the greater amount being constructed in other portions of the city.

With the increased mileage of underground conductors the amount of overhead wires must gradually decrease in time, and the amount of care and attention bestowed on them by this department will be much less than was necessary in the past or will be in the future. As these wires have been gradually removed from the prescribed district the department has been enabled to devote much more attention to the overhead construction in other portions of the city, and a marked improvement therein is gradually taking place which will finally result in better construction and a less number of fires due to electrical causes.

OVERHEAD DIVISION.

The work of this division is, as its name implies, the inspection and general supervision of overhead wires, poles, fixtures, etc., and the removal of what are known as "dead "

wires, so-called because they are not in use, having served the purpose for which they were originally intended, and been abandoned by their owners for the reason that the cost of removal would exceed their value. This applies principally to iron wire; old copper wire having a commercial value at all times it is seldom wholly abandoned by its owners. This class of wires is a constant source of danger to any community, and if it were possible to reach the owners thereof severe punishment should be dealt out to any person, firm or corporation that deliberately abandons any electric wire that has been erected within the limits of the city; but, inasmuch as ownership is very difficult to prove it would be next to impossible to reach the guilty parties except in the case of wires erected since 1894.

The fourth section of chapter 404, Acts of 1894, reads as follows: "Any city may recover, in an action of contract, of the person or corporation owning any such wire as is hereinbefore described, any expense which it may have incurred for any removal thereof." But previous to the organization of this department there was no means of identifying the great majority of the overhead wires, consequently it was found to be much easier for it to remove those relics of by-gone days and bear the expense, than to seek out the owners thereof, and compel them to perform this task or foot the bills.

Abandoned fixtures are also a source of danger, although in a lesser degree, than abandoned wires; over them the department has very little control, as they are erected on private property and cannot be removed without the consent of the owners. Ownership of these can usually be determined, but as the material of which they are constructed is not always suitable for other purposes they are often left undisturbed long after they have ceased to serve any useful purpose. Again, the owners of buildings very often derive a revenue in some form or other for the occupancy of their roofs, and so long as they can collect such revenue they oftentimes object to the removal of such structures by the original owners or this department.

Abandoned poles can be and are removed from the streets, but owing to joint occupancy by the wires and cables of many different parties, the task of fixing responsibility for the same and the removal of all the conductors therefrom is often a tedious one.

The practice of placing different classes of low tension wires on the same poles and fixtures is in no sense objectionable, but where they are placed on the same poles with

high tension wires — such as electric light, power and street-railway feeders — they become positively dangerous, and to a much greater extent than those that are known to be so under certain circumstances. High tension wires are carefully avoided by most people, and for that reason accidents arising therefrom are greatly reduced. The members of the Fire Department have been advised not to handle electric wires of any kind while in the performance of their duties, and such advice is being heeded, greatly to their personal advantage, but delays caused by the presence of overhead wires may at any time lead to serious loss of property that otherwise might be prevented.

While members of the Fire Department are ready to, and do, assume great personal risk in the performance of their duties, and are ready to brave dangers of which they know something, they cannot be expected to battle with the flames with confidence where unseen and unknown dangers may lurk in every electric wire at the scene of a fire. The possibility of low tension wires being converted into high will continue so long as both are in close proximity on the same poles and fixtures.

The following is the number of poles, fixtures and wires removed, with the exception of the trolley wires, from the 1898 district, which is the last section of the prescribed district established by the Act of 1894 :

Number of poles	52
Number of fixtures of all kinds	661
Number of feet of wire on poles	226,750
Number of feet of wire on fixtures	1,475,180
Number of feet of wire in cables	49,265
Number of feet of wire dropping from fixtures	57,475
Number of feet of wire (trolley) not removed	48,632
Number of feet of guard and span wires	113,475
Number of feet of feed wires	113,475
Number of feet of dead wire	836,100
Number of feet of dead wire retained	50,450
Number of feet of wire of all kinds removed	2,871,720
Number of poles in the city exclusive of the Boston Elevated Railway Company poles	15,355
Unknown fixtures removed	614
Defect notices sent out	3,693
Defects covered by above notices	15,963
Fuse inspections made	2,856
Number of places found not fused	298
Number of poles inspected	1,097

Number of inspections made	18,203
Defects corrected	3,029
Notices of new work received	4,534
Number of poles located	424
Number of poles set.	424
Number of poles removed.	69

The number of poles, fixtures and overhead wires removed since the Wire Department was organized is as follows :

Poles removed	2,041
Fixtures of all kinds	12,891

Wire on poles removed (feet)	2,359,050
Wire on fixtures removed (feet)	12,417,600
Wire in cables (feet)	13,845,870
Wire dropping from roofs (feet)	1,562,186
Railroad feed wires (feet)	288,722
Railroad guard and span wires (feet)	340,410

Total amount of wire removed	30,813,838
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This is about 5,836 miles. Of this amount 18,488,300 feet, or about 3,502 miles, can be classed as "dead" and abandoned wire, some of which was removed by the owners, but nearly all was removed by this department.

From many sections of the city come bitter complaints of the blighting effects of poorly insulated wires on the shade trees in the public streets. The answer to all such complaints is that this department does not grant rights to erect poles and wires in the streets, and has no right to revoke them. Where such rights are granted in streets blessed with shade trees they must suffer. The insulating covering on wires will not withstand the abrasion due to contact with the limbs of trees, and insulating supports cannot be securely fastened thereto, consequently the trees must suffer from the axe of the linemen or the escaping current.

WORK OF THE INTERIOR DIVISION.

The work performed by this division of the Wire Department is, without question, of the greatest importance to the safety and welfare of the people of Boston. While the work performed by the other employees can be seen at a glance by the most casual observer, the real value of the labors of the interior division can be measured only by the results that follow.



BURNING OF THE FITCHBURG RAILROAD GRAIN ELEVATOR, CHARLESTOWN.

The removal of unsightly poles (and they are all looked upon as such) and wires from the streets is readily taken note of, also the wires strung from house-top to house-top. The construction of underground conduits cannot escape the notice of many people, particularly those who use the streets for business or pleasure; but the careful and intelligent supervision of the thousands of miles of wire and the thousands of lamps, motors, rheostats, cut-outs, switches and other appliances that go to make up the electrical equipment of all classes of buildings can be observed by but few, and its great value appreciated by a still smaller number.

Thorough insulation of high and medium potential conductors is essential for the safety of life and property, and when we consider that the very best of it is of a perishable nature, and what a frail barrier it is to erect on the dividing line between danger and safety, we can then realize the care, thought and judgment that must necessarily be exercised in the installations of electric light, heat and power equipments in the stores, both wholesale and retail, filled with vast amounts of costly material, much of which being of a highly inflammable nature, banks, office buildings, warehouses, and, last but not least, the homes of the people, containing their most valued household treasures.

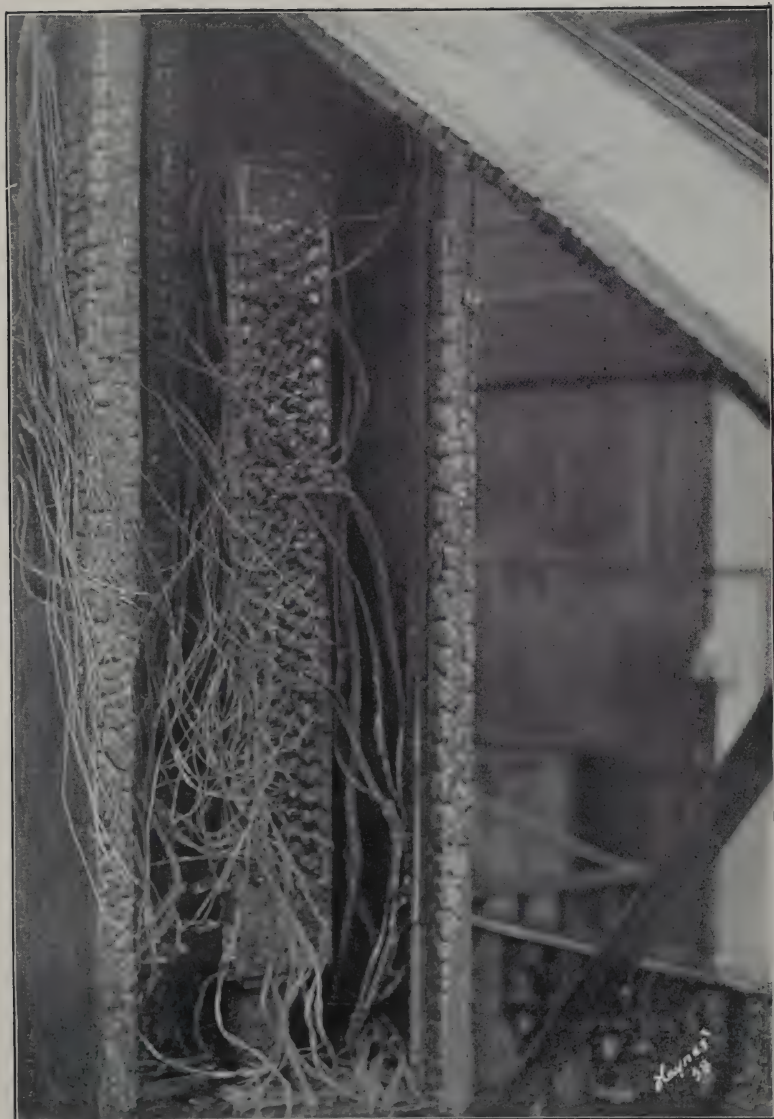
Water leaking from pipes seeks by force of gravity the sea-level; steam is diffused in the air; but electricity escaping from a conductor seeks to return to it over the easiest path. When it escapes or returns over poor conducting material, including air, wood and other fibrous substances, heat is generated, often in a sufficient amount to cause fire; for this reason great care must be taken to prevent the escape of current from or to the conductors contained within buildings of any kind. This is all the more important owing to the fact that by far the greater portion of the interior wires are concealed from view under floors and in those modern fire-traps, hollow partitions, and owing to another well-known fact that there is no such thing as a reliable and durable insulating covering for overhead conductors. Little would be lost in insulation if this so-called insulating covering for overhead wires was dispensed with, except where they come within easy reach of people, where the highest grade of insulation must be used and renewed as often as necessary.

The passage of current to and from overhead conductors may and does set fire to trees, poles, cross-arms, and sometimes the exterior walls and roofs of buildings, and while overhead wires are used the present state of the art cannot prevent it.

For the reasons above set forth the greatest possible care is insisted on in the insulation and construction of every interior equipment. So long as this can be done and a rigid supervision maintained over these equipments after they have been in use, fires due to electricity will continue to be very infrequent.

The great increase in the use of electrical energy for all purposes keeps the small force of men employed in the interior division fully employed in the supervision of new work, so that no time can be devoted to the inspection of any electrical equipment after it is first installed. This is very unfortunate, and is sure to lead to serious results, owing to various causes, a few of which are here enumerated. First, mechanical changes in the construction of the building or fixture. Second, the perversity of the plumber and gas-fitter, who persist in ignoring the fact that actual contact between gas, water and waste pipes and electrical conductors are not conducive to the safety of the building and contents, including the inmates. Third, the so-called "electrician," who has not learned that it is not a safe or proper thing to make bed-fellows of the paraffined cotton-covered bell wire, carrying the gentle pulsations of a few cells of open circuit battery, and its larger brother that may convey enough current to convert cotton, paraffine and copper to the gaseous state very quickly under conditions made possible by the above-named species of genus. Fourth, the owner or occupant of a building that has been equipped with electric lights, motors and other appliances, who can see no reason why he should employ a competent person to make changes or extensions in wires and fixtures when the man whom he employs to sweep his store or shop, or shovel coal under the boiler or into the furnace can do it just as well, while any old thing in the shape of wire and "other fixings" will do as well as the most approved article.

Next comes the self-styled electrical contractor, who may have been discharged from the employment of some reputable firm for incompetency, or because the market for low-grade labor was overstocked, whose principal stock in trade is, to use a slang phrase, his "colossal nerve and cheek," combined with a willingness to experiment with this subtle force of which he knows so little, at what seems to the average citizen a more than reasonable cost, until later the fire department is called to save his property and the insurance adjuster comes to settle what may be a total loss. There are others who have more capital, and make greater pretensions who are just as ready to excite the cupidity and take advantage



TELEPHONE TERMINAL BOX BURNED CUT. CAUSE, CROSS WITH HIGH TENSION WIRES.

of the ignorance of the public of electrical matters as the above-named persons.

These are some of the class that make the lives of the inspectors of the interior division a burden, and makes necessary almost "eternal vigilance" on their part to prevent not only incipient fires but possible conflagrations, due to the ignorance or dishonesty of some and the cupidity of others. Happily there are many electrical contractors who are honorable men, who heartily co-operate with this department in its efforts to render the generation and distribution of electric energy as safe as possible.

Not until many human lives had been sacrificed by both sewer and illuminating gas were our law-makers moved to enact laws compelling plumbers and gas-fitters to obtain a license from an authorized board before they could pursue their calling. The necessity for similar treatment for electrical workers is just as great, yet it would seem that more lives must be sacrificed and much property destroyed before they are compelled to prove their right to pursue a calling that requires as great an amount of care and skill as that of the gas-fitter and plumber.

Knowing the necessity for such a law applicable to electrical workers, this department has instituted and maintained a rigid examination of all candidates for positions as inspectors in the interior division, and up to the present time there has been no one so favored as to be able to secure such a position until he had demonstrated beyond a doubt his ability to perform the duties in a satisfactory manner; hence the undisputed success of this particular branch of this department.

Recruits for this division cannot be drawn from that large class of persons who are ever ready to serve the national, state or municipal government in any civic capacity, with a maximum of salary and a minimum amount of labor attached thereto, as that is not the kind of talent required for the faithful performance of the very important duties of this branch of the department.

In the past, so-called temporary wiring has caused this division no end of trouble and anxiety, particularly during the holiday seasons. Because of the fact that such equipments were to be used but for a short time, those desiring to make them seemed to think that all the safeguards provided for work of a permanent nature should be disregarded, and all rules ignored in these cases.

Most of the people could not realize that serious trouble might and could follow in the wake of poor workmanship

and poor material, almost immediately, and that show-windows and stores filled with inflammable material were not the places in which to try doubtful experiments with this subtle force, or permit it to step over the bounds within which it should be kept, even in the slightest degree, thereby endangering the lives of their patrons who, in the mad, frenzied rush from real or imaginary danger due to these temporary make-shifts, might trample and crush each other out of all semblance to human form.

Past experience has proved that "temporary work" oftentimes proves the most permanent, and for that reason and those before mentioned this class of work must be done with the same care as that of a known permanent character. While the cost is increased, the safety of the public is far more secure by this position taken by the Wire Department.

Electricity enters so largely into the productions placed on the theatrical stage at the present time that a great deal of time must be spent in the supervision of the various devices and appliances used in the production of scenic effects; many of these have not and will not be approved by this department. Great surprise and much indignation are expressed by the managers of travelling theatrical companies when doubts of the ability of their "electricians" are expressed by the representative of this department, and some or all of his methods and appliances condemned. All tell the same story, viz.: "No objections raised in other cities, the authorities of which know as much and more than the Boston Wire Department, or any of its representatives." When this argument fails, compliance with the rules of the department is made or open defiance given. In the latter case an appeal to the local managers is made, who invariably support the department by refusing to permit the introduction of anything into their places of amusement that does not bear the stamp of its approval.

I must now call attention to the fact that the number of men now employed in this division is not sufficient to perform the duties imposed on them by the law creating this department, and that some of the most important work devolving on it must be, and is, left undone. All that it is possible to do with the present force is to supervise the new work and a weekly inspection of the electrical plants in the theatres during the amusement season. In addition to these, large stores and other places using large amounts of electric energy are reinspected at no stated time, but when it is possible to do so. All buildings containing electric wires, lights, etc., should be inspected and electrically tested twice a year at

least, and all large establishments much oftener, because frequent changes and extensions are made in the wires and fixtures, often by employees who have had no special training or experience in this branch of work. In large establishments the man in charge of the steam boilers and engines cannot remove a gas burner, connect or disconnect a side bracket, or piece a gas pipe, or even seek out and stop a leakage of gas until he obtains a license as a gas-fitter, yet this same man can operate dynamos or motors, and even install them, together with lamps, switches, cut-outs and wires or any other electric appliances without leave or license from any one except his employer. The most conclusive evidence of incompetency of many of the employees of the owners of large establishments, containing isolated electric plants, or large ones to which current is supplied from public lighting stations, is found by the inspectors of this division daily; yet the department is powerless in the matter of employment of competent men for this purpose. It can only condemn the work and shut the current off until fatal defects are remedied, and in many cases point out those to be applied, thus acting as an educator for these embryo "electricians." What a multitude of sins incompetency and ignorance do cover!

Great improvements have been made in material used, workmanship, translating devices, and methods of distributing electric energy in the past few years. So great have been the changes (all made in the interest of safety) that nearly everything used ten years ago, with the single exception of copper wire and safety fuse metal, has disappeared from view except where they were installed, none of them being now manufactured or sold. The insulating covering for wire used in the earlier years is rarely seen and cannot be easily procured.

Hundreds of the best dwellings in our city are equipped throughout with these now condemned material and devices, for in those earlier years it was only the rich and well-to-do that could afford to equip their homes with electrical conductors and appliances when they were being constructed, and in anticipation of the time when an electric lighting company would furnish the necessary energy for incandescent lights. While the material used was the best that could be produced at the time, later experience has proved that it was and is utterly unreliable as a distributing medium for electric currents. Time must have made rapid inroads on this inferior material, and the conditions in some of these homes are anything but reassuring to the inmates.

It is within the power of this department to determine the

actual conditions in these and other buildings and give timely warning, did it have the means to do so, but it has not, and as a result cannot fulfil all the obligations imposed upon it. We have had within a short time a foretaste of what is liable to happen at any time under existing circumstances.

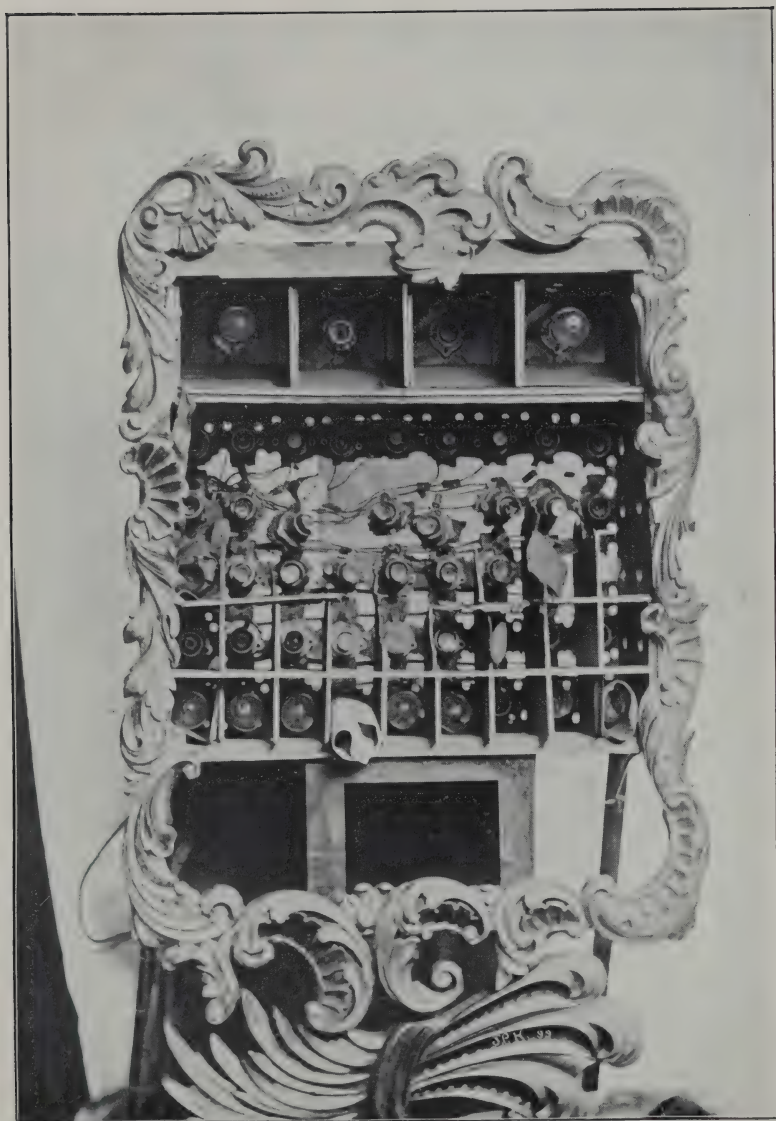
A modern fire-proof building, so called, equipped with electric lights, with the wires installed therein placed in what is known as paper conduit; the latter was imbedded in mortar, which destroyed it and the insulation on the wires also, permitting the escape of current to the iron portion of the structure, a small portion at first, which gradually increased until the transformer was taxed beyond its capacity, causing the insulation to break down, permitting current at a pressure of 2,000 volts to pass over the wires and through lamps designed for a pressure of 104 volts, resulting in fire being started at nearly every fixture. Fortunately the material of which the building was constructed was of a slow burning nature and these fires were discovered before much damage resulted, and fortunately no one was handling any of the lamps, sockets, switches, etc., at the time, or loss of life might be added to the loss by fire. This accident might have been prevented by a careful supervision by this department had it a sufficient number of men at its disposal in addition to the small but efficient force comprising the interior division.

The following is a summary of the work of the interior division:

Notices of new work received	5,355
Number of buildings in which wiring was completely examined	451
Incandescent lights examined	125,458
Arc lights examined	2,396
Motors examined	1,027
Total horse power of motors examined	5,681
Services examined	1,283
Inspections made	9,472
Defects reported	1,661
Defects corrected	926
Other defects in process of correction.	

The total number of fires due to electrical causes was 82, and they are classed as follows:

Fires in the interior of buildings	28
Fires on the roofs of buildings	6
<i>Carried forward</i>	34



FRONT VIEW OF AN ILLUMINATED SIGN BURNED OUT, DUE TO FAILURE OF MOTOR AND IMPROPER CONSTRUCTION.

<i>Brought forward</i>	34
Fires on the outside walls of buildings	16
Fires in standpipes for distribution	2
Fires on bridges	4
Fires on poles	6
Fires in trees	11
Fires in underground services	3
Fires in street cars	1
Miscellaneous	5
Total	<u>82</u>

Of the twenty-eight fires that occurred in the interior of buildings eight were due to the crossing of high and low tension overhead wires; two were caused by lightning; one was due to the carelessness of workmen who connected (by mistake) the two outside wires of a three-wire circuit to a two-wire tap, sending a current at a pressure of 220 volts through lamps designed for a pressure of 110 volts; one was caused by carelessness of some one who sent a current at a pressure of 2,000 volts through a recording watt-meter designed to register current at a pressure of 1,000 volts.

At the Berkeley-street bridge a fire occurred burning or melting that which is supposed to be fire-proof — steel and iron — of which the bridge is constructed, and a cast-iron gas main. The pyrotechnical display was quite startling for a short time and gave unmistakable evidence of the amount of energy that is flowing beneath our feet and over our heads, and the amount of damage it can do when diverted from its proper course.

The practice of publishing the record of fires occurring in street cars has been discontinued, because most of those reported were of a trivial nature, and the department for that reason is not warranted in devoting so much valuable time in investigating any but those of a peculiar nature, like the one which occurred on August 24, which also gave ample evidence of the pent-up energy that is made use of for so many purposes.

The total number of accidents due to electrical causes was	16
The total number of accidents to persons	11
The total number of accidents to horses (all fatal)	

Fortunately no human lives were lost during the year.

Although illuminating gas was found in a number of man-holes no explosions were due to that cause, on account of the strict supervision maintained, and the prompt action of the gas lighting companies in seeking out and repairing the same.

Two explosions of naphtha gas occurred, due to the carelessness or ignorance of employees who permitted the vaporization of this volatile fluid.

FIRES.

February 1. Fire occurred at the branch office of the Postal Telegraph-Cable Company, No. 9 Stoughton street, at about 1.45 A.M., caused by a cross between high and low tension overhead wires. Loss considerable.

February 1. No. 156 Tremont street, slight fire about 2 A.M., in the office of the Grand Lodge of Massachusetts Knights of Pythias, third floor front, caused by a cross between high and low tension overhead wires.

February 1. No. 165 Court street, slight fire about 4.22 A.M., in the building occupied by J. J. McNamara, caused by a cross between overhead constant current and constant high tension overhead wires.

February 1. Slight fire about 4.22 A.M., in the premises of W. H. Dunbar & Co., caused by a cross between constant current and outside high tension overhead wires.

February 1. Fire on roof of building No. 906 Columbus avenue, about 3 A.M., cause being a New England Telephone and Telegraph Company wire becoming detached during the storm and falling on the roof, at the same time coming in contact with an electric light wire.

February 1. Slight fire at Beacon-street bridge, about 4.30 A.M., caused by a number of Western Union Telegraph Company's wires getting detached from insulators during the storm and falling over Boston Electric Light Company's overhead wires.

February 1. Fire at Nos. 105-111 Arch street, caused by the failure of an automatic starting rheostat to operate properly, thereby leaving a portion of the resistance coils in circuit with the armature of the motor, causing the wire to heat sufficiently to set fire to the rubber insulation on the leading-in wires, and from these it was communicated to the oily woodwork in their vicinity.

February 1. Slight fire on the outside of No. 33 Temple place, caused by the burning out of an arc light cut-out switch, due to the effects of the storm in progress at the time. No damage to the building.

February 1. Slight fire in terminal box on pole in front of No. 40 Dorchester avenue, caused by the wires being in contact with high potential wires, due to the severe storm.

February 1. Slight fire in the house of Engine No. 43, Andrew square, caused by the fire-alarm wires being crossed by high potential wires, owing to the severe storm.

February 2. Fire in the office of the Western Union Telegraph Company in Boston and Albany Railroad Station on Kneeland street, at about 10.30 P.M., for which an alarm from box 56 was given.



REAR VIEW OF SIGN PICTURED IN PLATE NO. 5.

This fire was caused, no doubt, by high tension current entering over the wires of the Western Union Telegraph Company, as a result of a cross between their overhead wires and some high potential wires.

February 3. Slight fire on the roof of the Beacon Oil Works, East Boston, caused by telephone wires falling on an arc lighting circuit and on the zinc cornice, melting the latter badly.

February 5. Shortly before 10 P.M. a live wire of an arc circuit owned by the Boston Electric Light Company came down in Myrtle street, between Joy and Hancock streets, arcing quite brilliantly, but doing no damage.

February 5. Wires and insulation on fire at the corner of Charles and Leverett streets, caused by overhead wires falling on an arc circuit owned by the Boston Electric Light Company. Time, 9.30 P.M.

February 5. About 10.30 P.M. a lively arcing and flashing of wires occurred at the corner of Staniford and Cambridge streets, caused by a telephone wire falling across an arc circuit owned by the Boston Electric Light Company.

February 5. Slight fire at West End city stables, North Grove street, caused by a grounded arc light circuit. Alarm from box 25. This arc light circuit was also crossed with a telephone circuit.

February 5. Slight fire on the roof of building No. 36 Sudbury and No. 7 Howard streets, caused by an arc lighting circuit being crossed by a wire that fell on it.

February 7. Slight fire in a tree opposite No. 23 Broadway, South Boston, caused by a cross between a broken telephone wire that was wound around it and a high tension circuit.

February 7. Slight fire on Harvard bridge, caused by the failure of the insulation of the wires of a high tension circuit that supplies current to the series of incandescent lamps installed on each side of the bridge. Damage slight. This method of lighting this bridge has been condemned by this department, as it is a menace to the structure and the people who pass over it.

February 14. Slight fires at No. 50 Lincoln street and Nos. 127 and 131 Summer street, burning out a recording Watt meter at No. 50 Lincoln street and the incandescent lamps at Nos. 127 and 131 Summer street. This was caused by workmen connecting (by mistake) the two outside wires of a three-wire circuit to the two-wire circuit that supplied current to the lamps in these buildings, thereby increasing the voltage from 110 to 220.

February 16. Slight fire in the building No. 88 State street, caused by a cross between the wires of the Boston District Messenger Company and some high tension wires outside the building and the grounding of the insulated wire inside the building at a point where it was injured by staples.

February 20. Slight fire in the doorway of No. 24 Tremont row, caused by the failure of the insulation of an arc lighting circuit which permitted an escape of current to the front of the building.

February 22. Slight fire in a tree on Centre street, caused by a primary wire of an alternating circuit coming in contact with the iron hanger of the insulator through which current passed to the limb of the tree, thence four or five feet to the lead covering of a 60-wire telephone cable which was in contact with the upper side of the limb, which was about six inches in diameter; this limb was half burned off and the lead covering melted away; the insulation of the wires burned off and some of them fused together.

February 22. Slight fire at No. 31 Motte street, caused by an electrical contact between an arc lighting circuit and a metal water conductor on the front of the building. A severe rain-storm had been in progress several days.

February 22. Slight fire in a tree in the yard of No. 288 Highland street, caused by a contact between one of the limbs and an arc lighting circuit.

February 22. Fire at No. 959 Tremont street, caused by the grounding of a primary circuit through the iron case of a cut-out box fastened to the outside wall of the building. It was raining hard at the time of the fire, and had been for two days previously.

February 25. Slight fire at No. 124 Tremont street, caused by a metal frame for a floral design which accidentally came in contact with the binding post of a branch cut-out and a gas-pipe, causing a short circuit, which melted the binding post, burned a hole in the pipe and ignited the escaping gas.

March 8. Slight fire on a hanger-board in the hood of an arc lamp hanging in front of No. 27 Winter street. This was due to a broken wire or a loose connection on the board opening the circuit, forming an arc, causing the fire.

March 8. Flame was discovered issuing from the service ducts containing the wires that supply current to the electric lights in the building No. 5 to No. 11 Winter street. This was found to be due to the fact that the insulation of the wires had broken down, thus establishing an arc between the wires and the duct, which ignited the insulation.

March 21. Slight fire in a stand-pipe fastened to the outside wall of the Hollis-street Theatre, due to the failure of the insulation of a primary alternating service. No damage to the building.

March 26. Tree fire opposite No. 420 Sumner street, East Boston, caused by arc lighting wires breaking away from the insulators and falling on the limbs, which were badly burned.

April 2. Slight fire at No. 139 Broadway, South Boston, caused by an arc circuit coming in contact with the metal covering of the coping over a sign on the outside of the building, burning the insulation and scorching the metal. No damage to the building.

April 15. Slight fire on the outside of the Palace Theatre, No. 109 Court street, caused by the failure of the insulation of the wires of an arc lighting circuit at a point where it rested on woodwork that had been painted and bronzed. This might possibly have injured the insulation.

April 15. Slight fire at No. 51 Howard street, caused by the failure of the insulation of arc light wires which were attached to a sign by means of split porcelain cleats, current escaping by means of the cleat and screw which fastened it to the sign. It was raining hard at the time.

April 19. Slight fire on the outside of building at No. 660 Washington street, caused by the failure of the insulation of an arc lighting wire attached to a sign by means of split porcelain cleats. The trouble occurred at a joint in the wire which was in contact with the sign. It was raining hard at the time. Damage slight.

April 19. Slight fire in the building No. 180 Summer street, caused by sending a primary current having a difference of potential of 2000 volts through a recording Watt meter designed for a difference of potential of 1000 volts. Damage slight.

April 19. Slight fire on a sign on the outside of building No. 180

Summer street, caused by the failure of the insulation of an arc light wire supported on porcelain cleats. It was raining hard at the time. Damage slight.

May 1. Slight fire in clothing hanging in a closet in the Hotel Plaza, No. 417 Columbus avenue, caused by the molten metal of a safety fuse flying into or dropping on clothing hung in the closet where cut-outs were located.

May 4. Slight fire in the church of the Holy Trinity, corner Shawmut avenue and Cobb street, caused by incandescent lamps setting fire to a wooden shelf on which they were resting.

May 5. Slight fire at No. 51 Troy street, caused by the grounding of arc lighting wires in the building that were resting on wet wooden beams, and also charging call bell circuits which started fires in several places. Damage slight.

May 25. Slight fire in a tree in Jamaica Plain, caused by the primary wires of an alternating circuit being detached from insulators and falling on the limbs, burning them badly.

May 27. Slight fire at the Franklin Park Refectory, caused by the failure of the insulation of a transformer which permitted the primary current, having a difference of potential of 1000 volts, to enter the building over the secondary wires. Damage slight.

June 4. Slight fire at the base of a telephone pole standing on the corner of Heath and Walden streets, to which was attached a fire alarm signal box. The fire alarm circuit was crossed by an arc lighting circuit, and that in turn crossed by the primary wires of an alternating circuit, current from which charged the fire alarm circuit and the box, escaping to the earth by means of the ground wire at which point the pole was ignited.

June 8. Slight fire in a tree standing opposite Briggs place was caused by the wires of an alternating circuit coming in contact with the limbs.

June 13. Slight fire in a service stand-pipe at Boylston square, due to the failure of the insulation on the wires of an arc lighting circuit. No damage other than that to the wires and pipe.

June 14. Slight fire in the hood of an arc lamp suspended in front of the premises Nos. 17 and 19 Meridian street, East Boston, due to an open circuit on the wood hanger-board.

June 14. Slight fire in a tree standing opposite No. 71 Highland street, Roxbury, due to contact between the primary wires of an alternating circuit and some of the limbs, burning the latter badly.

July 8. Slight fire at No. 128 Court street, caused by an electric arc being formed between the fixture stem canopy of a ceiling fan motor and the metal ceiling.

July 26. Slight fire on the roof of No. 400 Atlantic avenue, caused by the primary wires of an alternating circuit coming in contact with the tin covering of the roof. Contact was made where the ends of the wire were coupled together, the screw-heads of the coupling having worn through the insulation.

July 27. Slight fire on the wooden hanger-board of a street arc lamp, caused by the imperfect closing of the switch when the lamp was trimmed.

August 4. Slight fire in the excavation for the new Masonic Temple, the only damage resulting therefrom being to the underground cable of the Edison Electric Illuminating Company. The cause was the settling of the cable box, the earth having fallen away from beneath it.

August 9. Fire in the metal wire shaft on the easterly wall of the Ferdinand street generating station of the Boston Electric Light Company, due to the failure of the insulation of the underground cables that enter and leave the building at this point. The probable cause was the grounding of 11 or 12 circuits at some point, causing an undue strain on the cable where it bent at a right angle in entering the station. The arc established at this point quickly spread to 21 of the 34 circuits contained in this shaft, rendering them useless for several hours until they were repaired. Four of these circuits were commercial, the remainder being for street lighting. Little or no damage resulted to the building.

August 17. Slight fires at No. 56 Lincoln street, caused by lightning entering the building over the electric light wires and seeking the ground through the medium of two rather antiquated insulating joints, thus establishing a path of low resistance for the passage of current, resulting in burning the insulating material between the flanges, permitting the gas to escape, when it was ignited, setting fire to the insulation on the wires. Damage slight.

August 19. Slight fire at No. 15 Dorchester avenue, caused by an improperly adjusted arc lamp on a low potential circuit, causing an abnormal flow of current through the resistance coils, overheating them; beyond the injury to the lamp and a slight scorching of the sheathing of the ceiling no damage resulted.

August 19. Slight fire in Boston & Albany grain elevator, Grand Junction Wharf, East Boston, caused by lightning striking a flag-staff on the building and passing from it to a twin electric clock wire, which was in contact with the iron straps that held the pole in place; from the clock wires it jumped to the woodwork, on which they rested at five different points, setting fire to the insulation of the wire, which was twin, igniting the woodwork. Fortunately, the fire was discovered by one of the watchmen, who extinguished it with a few pails of water taken from a cask kept filled with water for extinguishing incipient fires. Damage slight.

August 20. An electrical disturbance occurred on the Berkeley-street bridge, due to the fact that the fall (a steel wire) of one of the derricks used in the construction of the retaining wall on the south side of the tracks of the Boston & Albany Railroad coming in contact with the overhead trolley wire of the Boston Elevated Railway Company; from this point current from the trolley wire was conveyed over a steel guy wire that was fastened to the iron frame-work of the bridge, thence to a 16-inch gas main owned by the Brookline Gas Company, which rested on the bridge, melting out a portion of the metal about 5 inches in diameter; also badly melting the metal plate on which it rested. Flame and smoke were visible from different portions of the bridge, particularly at the points where the steel guy rope was attached, and where the gas main rested on the metal plate. The injury to the gas main was such as to necessitate the removal of the damaged length.

August 24. Fire in a street car owned by the Boston Elevated Railway Company on Tremont street, caused by a contact between the overhead trolley wire and a steel guy rope attached to a hoisting crane. Workmen were engaged in changing the position of this rope when they lost control of it and it dropped down on the trolley wire, which was quickly melted at that point, one end of it remaining suspended in the air while the other dropped on car No. 2302, which was inward bound and contained a number of passengers; the trolley



SHOWS EFFECTS OF BRINE ON ELECTRICAL CONNECTIONS.

Plate No. 7.

wire evidently came in contact with the trolley arm, causing an excessive flow of current through the car wiring, the insulation of which was destroyed, the bolts heated, and brakes and chains damaged. The passengers escaped injury.

August 26. Fire in the hood of a street arc lamp, caused by the ignition in some unknown manner of sparrow nests on the top of the hanger-board.

August 30. Slight fire in the basement of the building Nos. 67-69 Summer street, caused by the overheating of the resistance coils in a constant potential lamp, which failed to feed properly.

August 30. Slight fire at No. 199 Commonwealth avenue, caused by a short circuit at the base of a three-light electric wall fixture igniting a light gauze with which it was covered; from this the fire spread to silk wall hangings and the summer coverings placed over the same. Loss considerable.

September 6. A still alarm of fire was given from No. 384 Boylston street, due to the overheating of the coils of a small electric motor, it not having been properly cleaned and oiled. No damage.

September 17. Slight fire at No. 411 Washington street, caused by overloading an electric service in the basement; the insulation of the wires was burned off and the surrounding woodwork slightly scorched.

September 18. Slight fire at No. 543 Washington street, caused by the failure of a series cable beneath the sidewalk. Nothing damaged but the cable.

September 23. Slight fire in a tree opposite No. 100 B street, South Boston, caused by one of the wires of an alternating circuit becoming detached from an insulator and falling on some of the limbs, which were badly burned.

October 6. Slight fire at No. 83 Bedford street, caused by the short circuiting of a flexible cord of a combination gas and electric side wall bracket, the arc melting a hole in the pipe and igniting the gas that escaped therefrom.

October 11. Slight fire in a tree standing on the corner of Bowdoin and Quincy streets, Dorchester; caused by a wire of an arc circuit coming in contact with the limbs and finally burning itself clear.

October 18. Fire at No. 124 Tremont street, caused by an accidental contact between an electric light wire and a lead gas-pipe leading to and connected with the gas meter, through the medium of a screw driver in the hands of a workman who was in the act of connecting the service wires to the service cut-out; the arc formed between the blade of the screw driver, and the lead pipe melted a hole in the latter, permitting the gas to escape, which was ignited. At a point about 20 feet distant from where this occurred a lead water-pipe was in contact with an iron gas-pipe, and an arc was formed at this point which melted a hole in the lead pipe, permitting the water to escape; all of this transpired in a very few seconds. Damage slight.

November 18. Fire in a tree standing on the corner of B and Fourth streets, South Boston, caused by high potential wires being in contact with the branches; it was raining hard at the time.

November 18. Slight fire in the basement of Nos. 45 and 51 Avon street. A tunnel was being constructed under the surface of Avon street for the purpose of furnishing an underground passage between the basement of this building and the one on the opposite side of

the street and fronting on Washington street, numbered 450 and 452. For the purpose of furnishing light to the men engaged in the construction of this tunnel a string of two or three lamps were temporarily connected to a ceiling rosette located near the opening of this tunnel; this connection was not properly made, and, becoming loose, an arc formed, causing the wire to overheat and the insulating covering to ignite and burn off for a distance of about 5 feet, and about the same amount was burned off the wires of an arc light circuit which ran just above these wires; fortunately the arc wires were not "alive" at the time. As the ceiling of the basement was metal lined no other damage resulted.

November 19. Slight fire in a telephone cable box secured to a fixture on the roof of the building No. 7 Beacon street, caused by one or more telephone wires falling down on the wires of an alternating circuit; these wires were connected to an underground cable which terminated in this box. The fire was confined to the box and a few feet of the underground cable and an aerial cable that entered this box from above. It was raining hard at the time this fire occurred.

November 27. Fire on Federal-street bridge. This fire was caused by the extraordinary high tide which covered the Boston Elevated Railway Company's feed contact pieces at the draw-bridge; these contact pieces are necessary to maintain the continuity of the feeder circuits. The salt water coming in contact with this portion of the feeders resulted in a short circuit, causing the destruction of the contact pieces, seriously damaging the submarine cable at the channel, charring and scorching the bridge, and burning the Boston Elevated Railway Company's cable terminal-house.

December 7. Fire at No. 70 Meridian street, East Boston, caused by the burning out of the insulation on the wires of a transformer on the outside wall of the building. No damage other than that to the transformer.

December 8. The woodwork of a pole used for the support of an arc lamp for street lighting was set on fire and badly burned in a peculiar manner. The base of the pole was connected with the iron conduit in which were to be placed the conductors through which current would be supplied to the lamp, and for convenience in drawing the same up through the pole an iron wire was left in it when it was bored, the lower end of which rested on the iron pipe while the upper end rested on the metal portion of the pole; current in the meantime was supplied from an overhead circuit which found its way from the upper portion of the pole to the iron duct over the iron wire; an arc was formed with the above results.

December 10. Fire in the cable-house of the Western Union Telegraph Company, situated on the Boston side of the draw of the Boston & Maine Railroad bridge, caused by a contact between one or more of the telegraph wires and some high potential wire at some point unknown. Evidence of trouble was first discovered on the Western Union circuit running through Lynn, and next in a Boston & Maine Railroad circuit in the same cable and running through the same city, and in a few minutes all the circuits were rendered inoperative; the cable-house and contents were entirely destroyed, seventy-five telegraph circuits rendered inoperative and two other small structures on the bridge burned before the fire was extinguished. As the safety fuse in No. 14 circuit in the Western Union office at Lynn was melted it is fair to presume that the cross between wires must have occurred in or beyond that city.

December 12. Fire at No. 445 Boylston street, caused by a broken electric light wire which was concealed in a hollow partition; an arc was established at the break which ignited the insulating covering on the wire, and that in turn communicated fire to the adjacent woodwork.

December 16. Slight fire at No. 1145 Washington street, probably caused by a loose connection in an arc light cut-out switch fastened to a wooden wall block on the outside of the building. Damage confined to the switch.

December 20. Slight fire in the building No. 442 to No. 472 Washington street, due to a loose connection in some temporary wiring installed for the purpose of producing holiday effects. Damage slight.

December 21. Slight fire in a tree standing on the corner of Warren and Sutherland streets. Caused by the wires of an arc lighting circuit coming in contact with the branches and burning them slightly.

December 21. Slight fire on the outer wall of building No. 554 Dorchester avenue, at the point where an arc lamp was suspended, caused by the failure of the insulation on the wire where it passed through porcelain tubes fastened to the iron crane supporting the lamp, current escaping to the iron, thence to the wall, setting fire to the clapboards. It was raining heavily at the time the fire was discovered. Damage slight.

December 28. One of the inspectors of the interior division, while in the performance of his duties, found a hole burned through a wood partition one inch in thickness; upon investigation he found that some months previous an incandescent lamp was left hanging against this partition while it was lighting; it remained in this position all one night, with the above result.

December 31. Slight fire at No. 146 Tremont street, caused by the failure of the insulation of the wires in the stem of a chandelier suspended from a crow-foot attached to the ceiling, the immediate cause of such failure being temporary wiring made hurriedly without care or regard for consequences. Four strings of incandescent lamps, twelve in each string, were suspended across the room, one end of each being fastened to the stem of the chandelier; festoons of evergreen were wound around each string, which added to the weight of the lamps, drew the stem out of position sufficiently to injure the insulation of the wire contained therein; an arc resulted, which burned a hole in the canopy and set fire to the decorations suspended thereto.

January 3. Slight fire at No. 19 Exchange street, at a point where electric light wires were fastened to a wall block on the outside of the building by means of split porcelain cleats.

January 16. Slight fire above the roof of building No. 31 Winslow street, Roxbury, caused by the burning of the insulation on a pair of high tension wires becoming slack and swinging together. No damage to the building.

January 17. Fire in a tree standing opposite No. 47 and No. 48 Centre street, Roxbury, caused by the wires of an alternating circuit coming in contact with the limbs when they burned themselves clear.

January 17. Fire on an electric light pole used for distribution purposes standing at the south-east corner of Dover and Washington streets, caused by an improperly insulated primary wire of an

alternating circuit fastened to the pole by an iron staple; an arc established at this point burned the wire in two, at the same time setting the pole on fire.

January 24. Slight fire on the front wall of building No. 442 Atlantic avenue, caused by an escaping current from a cut-out switch through one of the screws that held it to the wall; it was raining hard at the time; water evidently found its way to this screw and to the inside of the switch.

January 25. Slight fire at No. 494 Washington street, caused by an escape of current from the wire of an underground arc light circuit to the lead covering, due to the failure of the insulation. Damage slight. This derived circuit through the ground was completed to an outside lamp on the same circuit hanging in front of No. 92 Essex street, current escaping to the frame of the lamp. No damage except to lamp.

ACCIDENTS.

February 1. Two horses owned by the Boston Elevated Railway Company were killed at the corner of West Sixth street and Dorchester avenue, at 12.45 A.M., by coming in contact with a long distance telephone wire that was in contact with a high potential wire.

February 1. At 4 A.M. a horse owned by Hugh Kelley was killed on Broadway Extension by coming in contact with a guard wire which was crossed with the trolley. Seven horses received shocks and were thrown to the ground at several points in South Boston by coming in contact with low tension wires that had broken under the unusual weight of snow and ice that had accumulated on them; when they came down they fell across the bare trolley wires and were charged with current at a pressure of 550 volts; these horses would have been killed had not the wires on which they fell been cut in many cases by the men of this department. As near as can be ascertained 15 horses were killed in this manner, as those in charge of them did not dare to touch the harmless wires that had thus suddenly become so dangerous.

February 1. About 1 A.M. the fire-alarm box on the house of Engine No. 15 became charged and several persons received shocks therefrom when they touched it; this was due to a cross between the fire-alarm circuit and one of high potential at some point where the former was broken by the accumulation of snow and ice.

February 5. Electrical disturbance at No. 24 Dock square, resulting in persons touching the cash carrier system receiving electrical shocks while in the transaction of their business. This trouble was due to the fact that one of the outside wires of a three-wire set of mains in the basement rested on a gas pipe, and at that point the insulation failed owing to the damp condition of the basement; the gas pipe extended to the first floor where it rested against the cash carrier system. The day was very rainy, and the floor of the store, which is a fish market, was very damp.

February 24. George H. Forbush received a shock while engaged in adjusting the brushes of a three horse power electric motor in the basement of building Nos. 5 to 11 Winter street. After the adjustment had been made he attempted to light an incandescent lamp that was suspended from the ceiling; as he grasped the lamp socket he received a shock that so startled him that he lost his balance and



SHOWS HOLE BURNED THROUGH WOOD PARTITION BY AN INCANDESCENT LAMP.

fell over, his right foot catching in a pulley on the counter-shaft, as a result of which his right side and back were severely strained; as he fell he grasped a rope attached to the handle of the motor switch, opening it and thereby preventing a more serious accident. An examination of the socket showed that the flexible conductor was in contact with the lamp socket, the insulation having been worn off.

May 12. John Williams, a lineman in the employ of the New England Telephone and Telegraph Company, received a shock that threw him from a pole owned by that company standing on Chelsea, opposite Bunker Hill street, Charlestown. On this pole was a cross-arm to which was attached a pair of primary alternating wires; in attempting to pass a rope over the telephone wires he grasped one of the iron braces with one hand while he stood on the electric light cross-arm; in some way his foot came in contact with a poorly insulated joint in the wire, thus permitting the current to pass through his body, burning his hand slightly and causing him to fall to the ground, a distance of about 12 feet; he was rendered unconscious for quite a while, but was able to perform light work a few hours later.

June 24. An explosion of gasoline vapor occurred in the manhole of the New England Telephone and Telegraph Company, by which one of its employees, a Mr. McDonald, received severe burns on his face and arms, while the hair and eyebrows of his helper who was standing over the opening were badly singed. The presence of vapor in the manhole was due to an open can of gasoline left therein, while it was ignited by a lighted gasoline torch used in soldering and wiping joints.

July 14. About 6.30 A.M. John J. Murphy, a lamp trimmer in the employ of the Boston Electric Light Company, while engaged in trimming the lamp on the pole standing on the corner of Lincoln street and Dorchester avenue, Dorchester, received a shock that caused him to fall to the ground, striking the pole steps as he fell head foremost; his head and shoulders struck the ground with great force. He had finished his work on this lamp and had removed his belt hooks from the frame and started to go down when he received the shock that came near costing him his life; the pole was one of the iron death traps that were used exclusively until recently. The man's hands showed no burns, his injuries consisting of two bad scalp wounds, and a badly strained back. The cause of this accident was as follows: A short distance from this post and on the opposite side of the avenue a wooden pole had been set by the American Telephone and Telegraph Company about a week previous to the time of this accident, permission having been granted to do so by the Board of Aldermen, and it was set without the knowledge of this department; passing by this pole were arc and primary alternating wires owned by the Boston Electric Light Company, and this pole was crowded so hard against them that they were forced together, the insulation finally breaking down, and the arc light circuit that should have been inactive at the time the lamp was trimmed was receiving current from the alternating circuit; thus, lack of proper supervision came near causing the loss of another human life.

September 19. About 11.45 A.M. A. J. McInness entered a manhole near the corner of Kneeland and South streets, for the purpose of connecting an underground service to the circuit while the same was in operation. While putting a jumper on to short

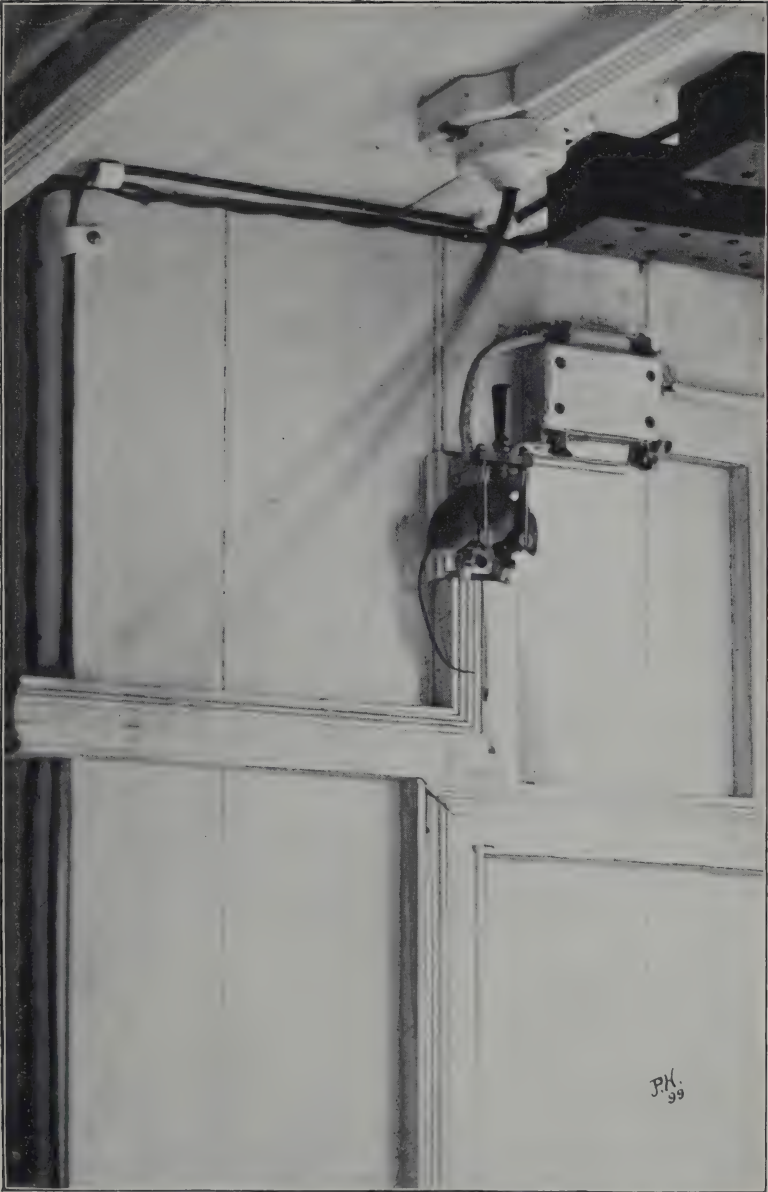
circuit the service loop, one end of it in some way became detached and dropped on his foot, which was encased in a light leather shoe. The latter was wet through and resting on the bottom of the manhole, which was covered with water, he being seated on a wooden box ; just what happened can only be surmised, as the other men who were with him were on the street above him, and the first indication to them of any trouble was smoke issuing from the manhole ; as quickly as possible he was removed to the surface of the street and then to the Emergency Hospital, where at first his life was despaired of, but he rallied later ; his leg, however, had to be amputated below the knee.

September 27. Daniel Harrington, an employee of the Boston Water Department, received a slight shock when he accidentally touched a broken telephone wire that had dropped down in the yard on Albany street. A contact between this and a feed wire, evidently made at the corner of Harrison avenue and Concord street, making a difference of potential between this broken wire and the ground of 550 volts, was sufficient to give any person a severe shock, but not necessarily a fatal one.

September 30. Peter Martin, an employee of the Edison Electric Illuminating Company, while placing incandescent lamps in an illuminated sign at the Grand Theatre, corner Washington and Dover streets, received a shock while climbing to the end of this sign, the ends of the fingers of one of his hands accidentally touching a bare spot in a primary alternating wire, and as the framework of the sign was of iron a derived circuit was established between it and the wire through his body for a moment. Fortunately his arm was so interlocked in the framework he was not thrown to the ground, a distance of about 25 feet. His injuries proved slight.

November 1. James B. Ward, an employee of the Metal Cornice Company, had his hand badly burned by a short circuit in a three wire porcelain main cut-out which was located just above a ledge or shelf about three feet from the floor ; the exposed parts of this cut-out were covered with mica, through which holes had been made by frequent "blowing" of the fuse, leaving the terminals bare. On this ledge was kept a tin box. Mr. Ward was placing the cover on this box when it came in contact with the terminals, with the result above stated.

November 15. Frank Brennan, a cable splicer, was quite badly shaken up, his hair singed and his clothing set on fire owing to an explosion of naphtha gas in the manhole at the junction of Shawmut avenue and Dover street, after he had taken the cover off and was about to enter for the purpose of splicing cables therein. The presence of the naphtha vapor was easily explained by an open can, partly filled with naphtha, that had been left in the manhole for some hours ; a sufficient amount of gas was given off therefrom to cause an explosion in this manhole and in one opposite No. 232 Shawmut avenue, about 212 feet distant from the first ; the cover of this second manhole was blown several feet in the air, and window glass near by was broken by the force of the explosion. Mr. Brennan and his assistant insisted that they had no lamp, lantern or other form of light near the open manhole at the time of the explosion ; assuming that such was the case the ignition of the gas can be attributed to a spark between the lead covering of the railway cables and the unspliced cables that were about to be joined together by this man. As the lead coverings of these continuous cables are



ELECTROCUTION OF A RAT BETWEEN SWITCH-BLADES.

connected directly to the negative side of the generators of the street railway company at the power house on Albany street, a considerable difference of potential would exist between them and the sections of unspliced cables; sufficient, no doubt, to ignite the naphtha gas and cause these two explosions.

November 27. One of a pair of horses owned by the Boston Cab Company that were attached to a cab that was being driven from Ashmont was instantly killed, and the other badly injured by coming in contact with a broken trolley wire at the corner of Dudley and Magnolia streets, Dorchester. The second horse was so severely burned that three of his ribs were bare of flesh. The harness and hack were badly burned also.

December 3. Accident to Adams Hoffman, electrician of the Grand Opera House, No. 1176 Washington street, in the following manner: While standing on an iron stairway his wrist came in contact with the blade of a jack-knife service switch placed in the secondary service wires. The shock he received was so severe that he was unable to free himself, but he was removed from his perilous position by two of the stage hands. The current for lighting this theatre is furnished from transformers, the difference of potential in the primary side of which is 1,000 volts, while that in the secondary side, which is connected to the lights, is 104 volts. Upon investigation the insulation between the primary and secondary coils was found to have been burned, permitting the high potential current to pass into the secondary wires running to this switch in sufficient quantities to give this man a severe shock, which might have resulted fatally had he not been promptly removed from his dangerous position.

January 2. Information was received this day that on the night of November 27 (during the blizzard), while Engine No. 20 was returning from a still alarm of fire, one of the horses was killed and another was burned on the left side of the neck by coming in contact with a live wire near the corner of Walnut street and Neponset avenue. As this department was not notified of this accident when it happened, the character of the wire that caused this accident cannot be determined; but as all overhead wires were heavily laden with snow, and large numbers of them were broken and badly crossed, it is fair to presume it was some of the light low tension wires that were the immediate cause of this accident.

January 27. While one of the inspectors of the interior division of this department was making an inspection at No. 18 Bosworth street he discovered a case of accidental electrocution. One of those lively little pests that persist in sharing the homes of rich and poor alike, and who carefully avoid the most cunningly devised traps and pitfalls set for their especial benefit, unwittingly ran into one, the effectiveness of which had not been demonstrated until he, failing to exercise the usual caution characteristic of his species, closed an electric circuit through his body when crawling across the poles of a double pole open jack-knife switch; as a result, animated nature quickly became inanimate.

UNDERGROUND DIVISION.

The section of the city in which wires were to be placed under ground during the year 1898 is that portion bounded as follows :

Beginning at the junction of Joy and Beacon streets, the boundary line runs through Joy to Cambridge street, through Cambridge street to the water front ; at that point it follows the Harbor Commissioners' line to the extension of the line of Berkeley street ; thence through Berkeley to Tremont street, through Tremont street to Castle square, through Castle square to Ferdinand street, through Ferdinand street to Columbus avenue, through Columbus avenue to Park square, through Park square to Charles street, through Charles to Beacon street, and through Beacon street to the point of beginning at Joy street.

This district contained 7,346,300 square feet and is the last section of that portion of the city known as the underground district.

The total area of the underground district as prescribed by chapter 404 of the Acts of 1894, is 46,415,000 square feet.

The following is a list of companies and individuals doing underground work during 1898 :

For Light and Power Purposes. (High Tension.)

Boston Electric Light Company.
Boston Elevated Railway Company. (West End Street Railway Company.)
Church Green Electric Light and Power Company.
Edison Electric Illuminating Company.
Brookline Gas Light Company.
Park Department and Public Grounds.
Suburban Light and Power Company.
Walker Building Plant.
Massachusetts Homœopathic Hospital.

For Telephone and Telegraph, Signalling and Miscellaneous Purposes. (Low Tension.)

New England Telephone and Telegraph Company.
Western Union Telegraph Company.
Boston Fire Department.
Boston Police Department.
Combination of small companies, including :
Boston Automatic Fire Alarm Company.

Boston Electric Protective Association.
 Holmes Electric Protective Company.
 Boston District Messenger Company.
 Mutual District Messenger Company.
 Postal Telegraph-Cable Company.
 Stock Quotation Telegraph Company.
 United Telegram Company.

STREETS IN WHICH CONDUITS HAVE BEEN LAID
 DURING 1898.

In the underground district, that is, that portion of the city proper north of Dover and Berkeley streets, underground conduits have been laid in the following streets:

Albion,	Causeway,	Oak,
Aldine,	Central Wharf,	Oxford,
Arlington,	Chardon,	Parkman,
Ashburton place,	Church,	Paul,
Atlantic ave.,	Columbia,	Pearl,
Avery,	Columbus ave.,	Pemberton square,
Avon place,	Commercial,	Pinckney,
Beach,	Congress,	Portland,
Beacon,	Cornhill,	Prince,
Belcher lane,	Court square,	Province court,
Berkeley,	Dorchester-ave. ext.,	Province,
Beverly,	Essex,	Public Garden,
Billerica,	Friend,	Revere,
Blackstone,	Hanover,	Shawmut ave.,
Boston Common,	Harrison-ave. ext.,	Summer,
Bowdoin,	Hayward place,	Summer-street ext.
Boylston,	Joy,	Tamworth,
Brighton,	Lowell,	Temple,
Brimmer,	Milton place,	Travers,
Bromfield,	Minot,	Tremont,
Bumstead court,	Mt. Vernon,	Wall,
Canal,	Myrtle,	Washington.
Castle square,	North End park,	Way,

OUTSIDE THE UNDERGROUND DISTRICT CONDUITS HAVE
 BEEN LAID IN STREETS AS FOLLOWS:

A street (S.B.),	Blackwood,	Clarendon,
Albemarle,	Boylston,	Commonwealth av.
Audubon road,	Bothnia,	Concord square,
B street (S.B.),	Cambridge (Chsn.),	Congress,
Bay State road,	Chandler,	Dartmouth,
Beacon,	Chester,	Dorchester ave.,

Dorchester,	Massachusetts ave.	Warren ave.,
Dudley,	Montgomery,	Washington,
East Broadway,	Newbury,	West Broadway,
East First,	Raleigh,	West Brookline,
East Second,	Sleeper,	West Canton,
Fargo,	St. Botolph,	West Eighth (S.B.),
Huntington ave.,	St. Stephen,	West Newbury,
K street (S.B.),	Springfield,	West Newton.
Kenmore,	Taber,	
L street (S.B.),	Tremont,	

Owing to the construction of new tracks by the Boston & Providence Division of the New York, New Haven & Hartford Railroad, between Dartmouth street and the new Southern Union Station, and the widening of bridges over the same, the electrical conduits crossing these bridges had to be relocated, and work of a temporary nature had to be resorted to to provide against an interruption of the electrical service.

The number of permits and electrical approvals for street openings granted by this department in connection with the underground work is 1,029.

The number of inspections made by this division is 3,857.

The ducts laid this year for the main conduits are of the following types:

1. Cement lined.
2. Vitrified clay.
3. Wrought iron.
4. Wooden.

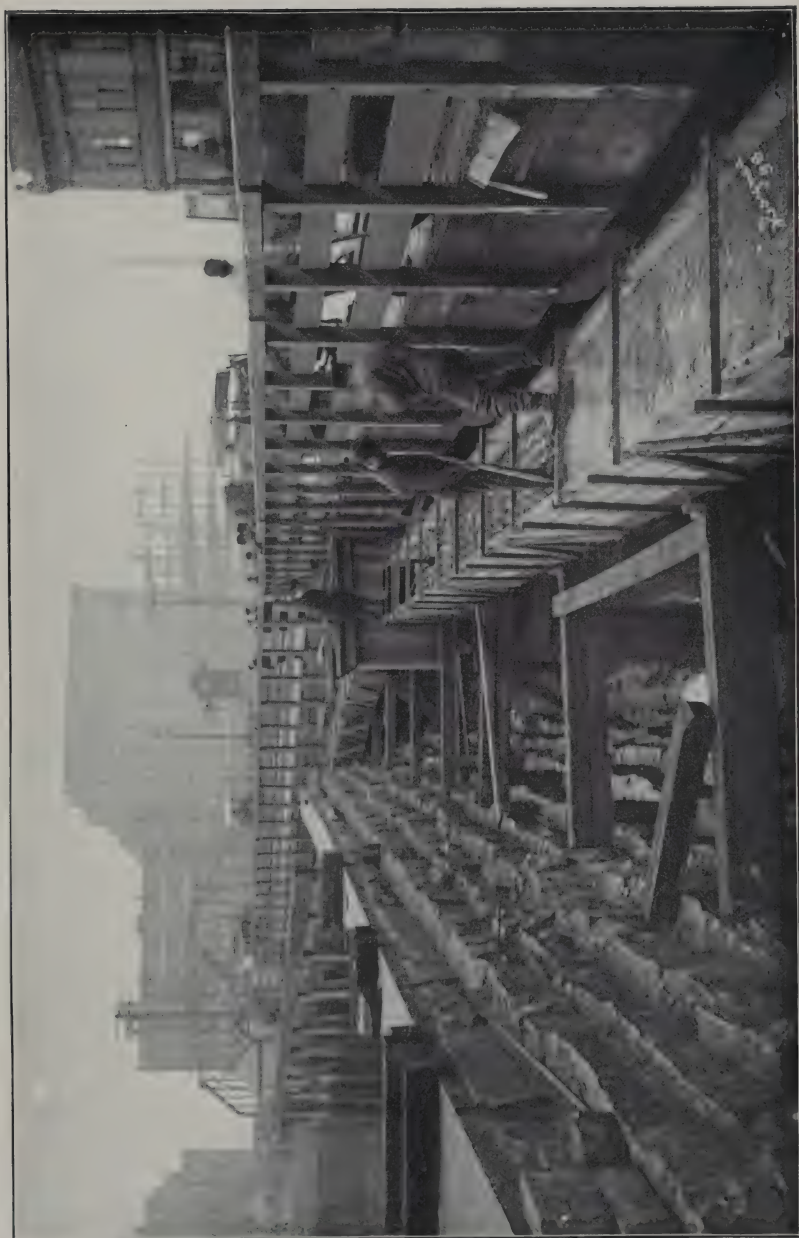
For service connections made from manholes to buildings, poles, etc., wrought iron pipe is used exclusively.

The total work for the year 1898 comprised:

112,254 feet of conduit.
 835,180 feet of duct.
 947 service connections.
 556 manholes built.
 1,202,914 feet of cable drawn in.

One new feature in connection with the underground construction during the year has been in the use of submarine conduits for carrying cables under the channel at draw-bridges.

The first submarine conduit in this city was constructed by the New England Telephone and Telegraph Company to carry cables under the Charles river at the Warren bridge,



ELECTRICAL CONDUIT AT THE CONGRESS-STREET BRIDGE.

between the city proper and Charlestown, and was sunk at this point during the month of September of the present year.

DESCRIPTION OF SUBMARINE CONDUIT.

The conduit, which is in the shape of a letter U, consists of 7 wrought iron pipes, each $4\frac{7}{8}$ inches in diameter and $\frac{1}{4}$ inch thick, covered with alternate layers of Bermuda asphalt and cheese-cloth to a depth of $\frac{3}{16}$ of an inch. These pipes are held in position by means of wooden diaphragms (17 inches in diameter) placed from 2 to 4 feet apart, and in which there are 7 holes through which the pipes pass, separated by a distance of $\frac{1}{2}$ inch. The whole is enclosed in a wooden pipe 4 inches thick and 25 inches external diameter.

The dimensions of the conduit are :

Length from end to end, 115 feet.

Distance between uprights, 48 feet.

External diameter, 25 inches.

This construction provides a permanent submarine conduit into which the ordinary lead covered underground cables can be drawn.

Two other submarine conduits were built during the year of entirely different construction to the one just described.

They were constructed by the Boston Electric Light Company for the purpose of carrying a large number of cables from the new power station at L and East First streets across the reserve channel at the L-street bridge and across the Fort Point channel at the Congress-street bridge, and were placed in position during the month of October.

The conduit at the L-street bridge is similar in construction to the one at Congress street, and differs only in its length.

DESCRIPTION OF SUBMARINE CONDUIT.

The conduit is built up of sections of wood, and is rectangular in cross-section dimensions, 42 x 28 inches, with 24 holes ($3\frac{1}{2}$ inches in diameter) passing through from end to end. The sections composing the conduit have a uniform thickness of 6 inches, but are cut in lengths varying from 4 to 20 feet, and the following standard widths: 8, 12 and 14 inches. The surfaces of these sections are grooved so that the holes are formed by laying one section on top of

another. Galvanized iron bolts and kiln-dried dowel pins extend through the conduits horizontally and vertically, thus holding the section in place and giving solidity to the structure.

The dimensions of these conduits are:

Length from end to end, L-street bridge, 143 feet; Congress-street bridge, 282 feet.

Distance between uprights, L-street bridge, 83 feet; Congress-street bridge, 205 feet.

Cross section (rectangular), L-street bridge, 42 x 28 inches; Congress-street bridge, 42 x 28 inches.

Photographs were taken illustrating the different stages in the construction of these submarine conduits, also the launching and manner of sinking the same in the channel.

A large number of photographs were obtained during the year showing the most interesting portions of the underground work.

The following is a description and report of the underground work of the various companies for the year ending January 31, 1899:

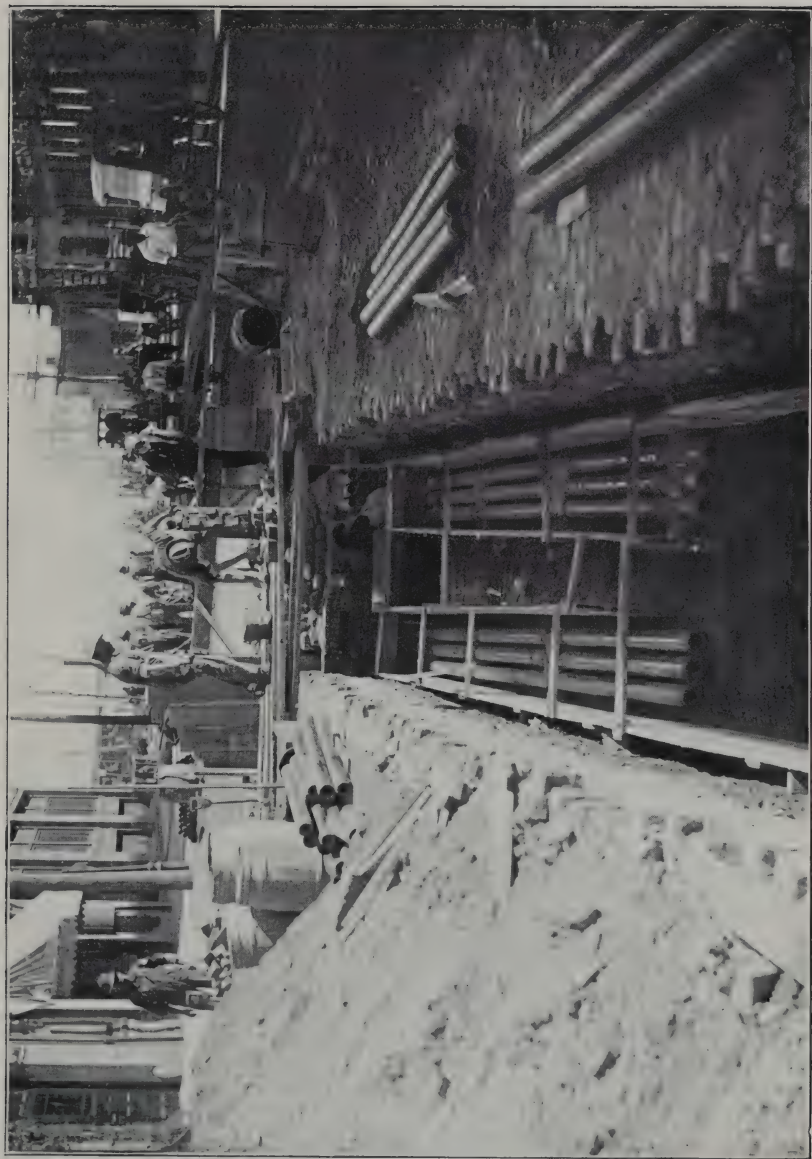
BOSTON ELECTRIC LIGHT COMPANY.

The work of this company during the year has been very extensive, for, in addition to laying conduits in the underground district and extending conduits outside this district, it was necessary to connect the underground system in the city proper with the new central power station, erected at L and East First streets, South Boston.

Two trunk lines were laid for this purpose, one from the power-house through L street, Summer-street extension, Fargo, B and Congress streets to Gilbert place, connecting with the underground conduits entering the Gilbert-place station; the other from the power station through L, East First, K, East Second and Dorchester streets, West Broadway and A street to West Fourth street, from which point it will be extended next year.

Each of the trunk lines consists of 24 cement-lined ducts with double manholes, 12 ducts entering each manhole.

The route taken by the first trunk line necessitated crossing the reserve channel at the L-street bridge, and Fort Point channel at the Congress-street bridge. This was accomplished by means of a 24 duct wooden submarine conduit sunk in the channel at each bridge, connecting at cable-houses with the underground conduits.



METHOD OF LAYING A 24-DUCT CONDUIT IN CONGRESS STREET.

Plate No. 11.

The following is a list of the streets in which conduits have been laid, also the number and kind of ducts in each.

Street.	From.	To.	Number Ducts.	Type.
A	W. Broadway	W. Fourth	24	Cement-lined
Albion	Paul	Castle	3	"
Aldine	Gilbert pl.	Hathaway pl.	1	"
Arlington	Marlborough	Beacon	2	"
Ashburton pl.	14 Ashburton pl.	Bowdoin	1	"
Atlantic ave.	Essex	Kneeland	8	"
Audubon road	Beacon	Brookline ave.	1	Iron
Avon st.	42 Avon st.	Washington	1	"
B	Fargo	Congress	24	Cement-lined
Beacon	Arlington	Massachusetts ave., n. side	2	"
Beacon	Arlington	Massachusetts ave., s. side	2	"
Beacon	Kenmore	Brookline ave.	4	"
Berkeley	Tremont	Columbus ave.	4	"
Beverly	Causeway	Warren bridge	1	Iron
Billerica	Causeway	Minot	1	Cement-lined
Blackwood	6 Blackwood	St. Botolph	1	Iron
Blackstone	53 Blackstone	73 Blackstone	2	"
Bowdoin	Beacon	Bulfinch pl.	1	Cement-lined
Boylston	Church	Arlington	2	"
Boylston	Berkeley	473 Berkeley	2	Iron
Brighton	Leverett	Lowell	1	Cement-lined
Canal	Travers	Causeway	1	Iron
Castle square	Paul	Chandler	4	Cement-lined
Chardon	86 Chardon	Merrimac	2	Iron
Church	Providence	Boylston	2	Cement-lined
Columbus ave.	Ferdinand	Berkeley	12	"
Commercial	State	S. Market	1	Iron
Commonwealth ave.	Massachusetts av.	Kenmore	2	"
Congress	Gilbert pl.	B	24	Cement-lined
Derne	Bowdoin	Hancock	1	"
Dorchester ave.	Summer	Mt. Washing- ton ave.	2	"
Dorchester	E. Second	W. Broadway	24	"
E. First	L	K	24	"
E. Second	K	Dorchester	24	"
Fargo	Summer-st. ext.	B	24	"
Fort Point chan- nel at Congress- street bridge (submarine)			24	Wooden
Friend	92 Friend	Merrimac	1	Iron
Hanover	Court	Elm	2	"
Joy	Mt. Vernon	Cambridge	6	Cement-lined
K	E. First	E. Second	24	"
Kenmore	Beacon	C o m m o n - wealth ave.	1	Iron
L	E. First	L-st. bridge	24	Cement-lined
Lowell	Brighton	Causeway	1	"
Massachusetts av.	Newbury	C o m m o n - wealth ave.	4	"
Milton pl.	Federal	12 Milton pl.	1	Iron
Minot	Leverett	Nashua	1	Cement-lined
Mt. Vernon	Charles	Joy	6	"
Myrtle	Hancock	Joy	1	"
Myrtle	Revere	132 Myrtle	1	Iron

Street.	From.	To.	Number Ducts.	Type.
Newbury	Hereford	Massachusetts ave.	4	Cement-lined
Oak	Harrison ave.	Tyler	1	Iron
Parkman	N. Grove	Cypress pl.	1	"
Paul	Tremont	Albion	4	Cement-lined
Pearl	37 Pearl	45 Pearl	1	Iron
Pemberton sq.	2 Pemberton sq.	12 Pemberton sq.	1	"
Portland	171 Portland	201 Portland	1	"
Province ct.	Province	18 Province ct.	1	"
Province	5 Province	42 Province	2	"
Reserve channel at L-street bridge (submarine)			24	Wooden
St. Botolph	146 St. Botolph	Blackwood	1	Iron
Revere	Charles	Myrtle	1	"
St. Stephen	Massachusetts av.	Gainsborough	1	Cement-lined
Shawmut ave.	Pleasant	Common	2	"
Summer-st. ext.	L-street bridge	Fargo	24	"
Temple	Derne	40 Temple	1	"
Tremont	Hollis	Common	3	Iron
Tremont	Pleasant	Warrenton	3	"
Tremont row	Howard	Pemberton sq.	2	"
Wall	Causeway	27 Wall	3	Cement-lined
Washington	Dover	Laconia	8	"
Washington	Cornhill	163 Washington	1	Iron
W. Broadway	Dorchester	A	24	Cement-lined

The cables drawn in the underground conduits during the year are rubber and paper insulated, and of the following sizes: Nos. 6, 4, 2, 00, 0000, 500,000 circular mills, and four conductor (telephone cable).

Sixty-three underground transformers, capacity 200, 400 and 600 lights, were installed in the manholes of this company.

The work for the year comprised:

- 49,087 feet of conduit.
- 471,851 feet of duct.
- 805,799 feet of cable drawn in.
- 473 service connections made.
- 294 manholes built.
- 63 underground transformers installed.

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY.

In certain sections of the city, such as the Back Bay and South End, this company has adopted the back alley system of distribution. Conduits running through main streets were extended up side streets to poles in alleys where underground cable connects with overhead wires, which are carried on poles through alleys, distributing to customers at various points.

The work on Albemarle street, Concord square, Springfield street and West Brookline street is of this nature.

During September of this year this company sunk a submarine conduit consisting of seven wrought iron pipes, enclosed in a wooden tube, under the Charles river at the Warren bridge, to carry its underground cables from the city proper to Charlestown.

The following is a list of streets in which underground conduits have been built, also number and kind of ducts in each :

Street.	From.	To.	No. Ducts.	Type.
A, South Boston	N. Y. & N. E. R. R.	W. Broadway	4	Vit. clay
Albemarle	St. Botolph	Private way	2	Cement-lined
Avery	Washington	Haymarket pl.	3	"
Beach	Oxford	Harrison ave.	12	Vit. clay
Belcher lane	Atlantic avenue	Purchase	2	Cement-lined
Beverly	Cooper	Causeway	*6	V. C. & C. L.
Beverly	Causeway	Warren bridge	**4	Cement-lined
Bromfield	Washington	Tremont	3	"
Cambridge (Chsn)	Main	B. & M. R. R.	3	Wooden
Charles river at Warren bridge (submarine)			7	Wrought-iron
Chester (Brigh'n)	Brighton avenue	Ashford	2	Cement-lined
Concord square	Tremont	Private way	2	"
Congress	Atlantic avenue	Bridge	†6	Vit. clay
Court square	Court	37 Court sq.	2	Cement-lined
Dartmouth	Tremont	B. & A. R. R.	4	Vit. clay
Dorchester ave.	Summer-st. ext.	Bridge	6	"
Dorchester	W. Eighth	Dorchester av.	4	Iron, C. L. & V. C.
Dudley	Magazine,-	Alexander	4	Vit. clay
E. Broadway	Dorchester	L	4	"
Essex	Harrison ave.	Oxford	28	Cement-lined
Essex	Oxford	Kingston	22	V. C. C. L.
Essex	Kingston	Essex place	15	V. C. & iron
Essex	Essex place	South	12	"
F, South Boston	W. Broadway	W. Eighth	4	Vit. clay
Harrison-av. ext.	Essex	Hayward pl.	4	V. C. & iron
Hayward place	Harrison-av. ext.	Washington	4	Vit. clay
L	E. Second	E. Fifth	4	"
Massachusetts av.	Huntington ave.	St. Botolph	3	Cement-lined
Oxford	Essex	Oxford station	48	Vit. clay
Oxford	Oxford station	Beach	30	C. L. & iron
Province	Bromfield	Bosworth	2	Iron
St. Botolph	Massachusetts av.	Albemarle	2	C. L.
Shawmut ave.	Compton	Cobb	2	Wooden
Springfield	Tremont	Private way	2	Cement-lined
Taber, Roxbury	Warren	Harrison ave.	12	"
Tamworth	La Grange	Boylston	2	C. L. & iron
Tremont	Waltham	Berkeley	†6	Vit. clay
Warren ave.	Berkeley	Private way	2	Cement-lined
Warren ave. (Chsn)	City square	Warren bridge	4	Vit. clay
Washington	Hayward place	Avery	3	Cement-lined
Washington	Bromfield	Franklin	3	"

* This enlarges old conduit to 10 ducts.

** Enlarges old conduit to 11 ducts.

† Enlarges old conduit to 15 ducts.

‡ Enlarges old conduit to 8 ducts.

Street.	From.	To.	No. Ducts.	Type.
Washington (Br.)	Lake	Newton line	6	Wooden
Washington	Dudley	Ruggles	6	Vit. clay
Washington	Ruggles	Waltham	9	"
W. Brookline	Tremont	Private way	2	Cement-lined
W. Eighth	F	Dorchester	4	Vit. clay
W. Newbury	Brookline ave.	Charlesgate	2	Cement-lined

The cables drawn in by this company are paper insulated, the largest number of conductors in one cable being 120 pair.

The work of the year consisted of :

37,776 feet of conduit.
 216,374 feet of duct.
 191,761 feet of cable.
 106 service connections.
 152 manholes built.

BOSTON ELEVATED RAILWAY COMPANY.

This company had very few wires in the 1898 district, and provision for the same was made by extending the underground system from corner Tremont and Milford streets, through Montgomery, Clarendon, Chandler and Dartmouth streets, to Boylston street, and by laying conduits in the subway incline of the Public Garden from Charles to Church streets.

In addition, conduits were laid in the sections of the subway constructed during the year under Tremont street, Cornhill, Court street, Hanover street, Adams square, Washington street and Haymarket square. The cables drawn into the subway conduits permitted the removal of those wires which were temporarily allowed to remain overhead on Washington and Hanover streets, Cornhill, Court and Merrimac streets, pending the completion of certain sections of the subway by the Boston Transit Commission.

TERMINAL POLES.

Terminal poles were established at the following places :

Opposite No. 92 Hanover street, near Portland street (connection from subway).

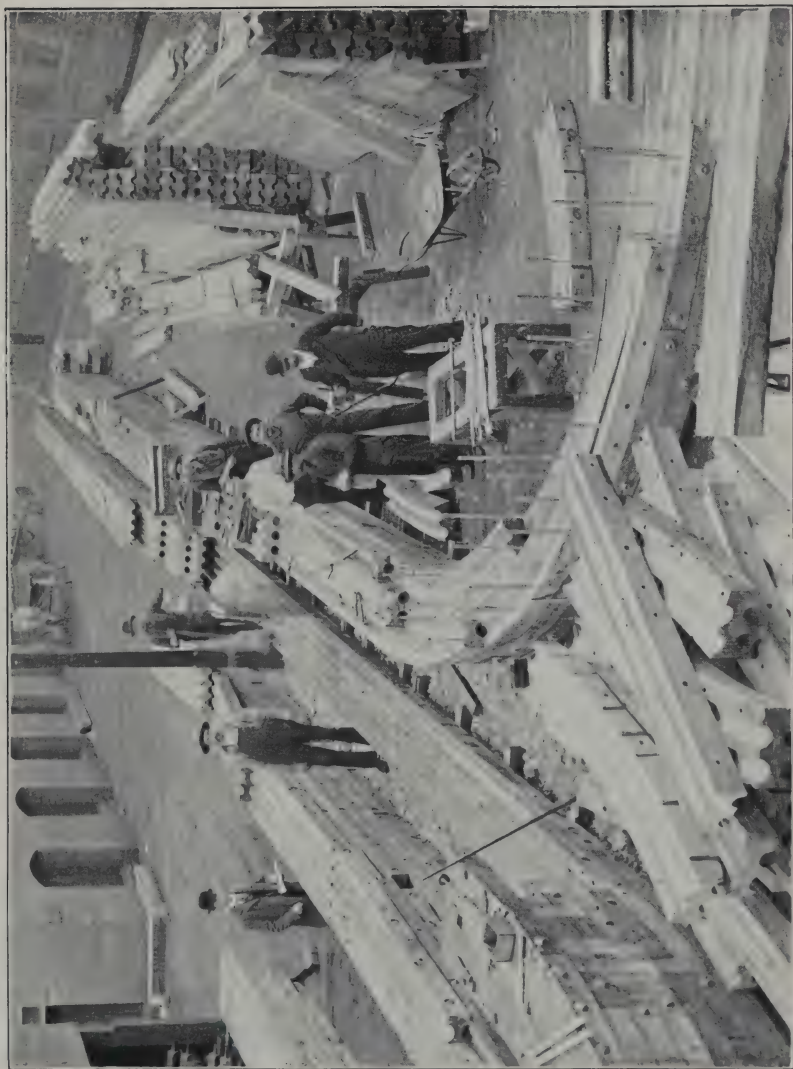
Washington street, at Dock square.

Travers street, at subway incline.

Subway approach, opposite No. 101 Haverhill street.

Subway approach, opposite No. 83 Haverhill street.

Haymarket square, at Merrimac street (connection from subway).



DETAILS OF CONSTRUCTION OF A SUB-MARINE CONDUIT.

Opposite No. 79 Court street, near Hanover street (connection from subway).

Hanover, at Friend street.

Dorchester avenue extension, north of bridge.

Boylston street, opposite Church street.

Columbus avenue, at Dartmouth street.

Boylston street, at Dartmouth street.

Dartmouth street, at Huntington avenue.

Summer street, near Chauncy street.

Additional feeder cables were run to old terminal poles in the city proper, and this necessitated the laying of additional ducts to old terminal poles as follows :

Washington street, at Broadway.

Washington street, at Boylston street.

Summer street, at Washington street.

The feeder cables drawn in during the year are paper insulated, size 1,000,000 and 500,000 circular mills; the cables for lighting the subway, drawn into subway conduits, are rubber insulated, size No. 3, No. 00 and No. 0000. For the return system both weather-proof insulated and bare cables are employed.

CONDUIT CONSTRUCTION OF THE BOSTON ELEVATED RAILWAY COMPANY.

Street.	From.	To.	No. Ducts.	Type.
Montgomery	Tremont	Clarendon	8	Clay
Clarendon	Montgomery	Chandler	8	"
Chandler	Clarendon	Dartmouth	8	"
Dartmouth	Chandler	Hunt'gton av.	6	"
Huntington ave.	Dartmouth	Blagden	3	"
Tremont (e. side in subway)	Park	Court	6	C. L.
Tremont (w. side in subway)	Park	Court	6	C. L. & clay
Cornhill (in sub- way)	Court	Adams sq.	4	Clay
Wash'ton (e. side)	Adams sq.	Hanover	8	"
Wash'ton (w. side)	Adams sq.	Hanover	8	"
Wash'ton (e. side)	Hanover	Haym'ket sq.	6	"
Wash'ton (w. side)	Hanover	Haym'ket sq.	6	"
Wash'ton (centre in subway)	Hanover	Haym'ket sq.	4	Clay & w. iron
Subway incline	Haymarket sq.	Travers	8	"
Subway incline	Haymarket sq.	Travers	8	"
Subway approach	Travers	Causeway	16	"
Causeway	Subway approach	Canal	18	C. L.
Court (in subway)	Tremont	Hanover	6	Clay
Hanover (in sub- way)	Court	Washington	6	"
Subway incline	Charles	Public Garden	2	"

The work of the year consisted of:

13,463 feet of conduit.
 89,473 feet of duct.
 66 manholes.
 20 service connections.
 95,633 feet of cable.

EDISON ELECTRIC ILLUMINATING COMPANY.

Work on the drawing-in system of this company consisted in laying underground conduits for feeder cables from old conduit at West Canton and Montgomery streets, through West Canton street, Warren avenue and West Newton street, connecting with old conduit at Huntington avenue. This completes a line of underground conduit between the West Canton street and Scotia street stations.

The Head place, Atlantic avenue, West Canton street and Scotia street stations are now connected by means of underground conduits on drawing-in system.

The appended table shows the streets in which conduits were laid during the year, the number and kind of ducts in each:

Street.	From.	To.	No. Ducts.	Type.
W. Canton	Montgomery	Warren ave.	6	Clay.
Warren ave.	W. Canton	W. Newton	6	"
W. Newton	Warren ave.	Huntington ave.	6	"

The feeder cables drawn in the above conduits are rubber insulated and of the following sizes: Positive and negative are of 1,000,000 c.m. cross section; neutral of 350,000 c.m. cross section. The pressure wire cables are rubber insulated and contain 3 conductors.

During the year a 10-pair rubber insulated telephone cable has been installed in the conduit between the Head place and Atlantic avenue stations to furnish private telephone service.

The following is a summary of vitrified clay conduit work:

2,224 feet of conduit.
 13,629 feet of duct.
 6 manholes built.
 32,924 feet of cable drawn in.

SOLID SYSTEM.

The following streets were opened for the purpose of laying 3-wire Edison main tubing:



SUB-MARINE CONDUIT READY TO BE SUNK IN THE CHANNEL.

Street.	From.	To.
Ashburton pl.	No. 16	Bowdoin.
Bay State road	No. 71	Deerfield.
Bothnia	Boylston	Belvidere.
Boylston	Bumstead ct.	Washington.
Boylston	Parker	Fenway.
Brimmer	No. 22	Pinckney.
Bumstead ct.	Boylston	Avery.
Commonwealth ave.	No. 508	No. 522.
Huntington ave.	No. 18	Dartmouth.
Joy	Mt. Vernon	Mt. Vernon place.
Newbury	No. 283	Gloucester.
Oxford	No. 15	Essex.
Pinckney	Brimmer	Charles.
Prince	Salem	Hanover.
Private way	Congress	Sleeper.
Sleeper	Private way	Summer-st. ext.

The total amount of 3-wire Edison tube laid during the year is 13,463 feet, made up of:

4,805 feet of main.
8,658 feet of service.

Two hundred and thirty-nine service connections were made, both tube and steel-armored cable being employed for this purpose.

The number of distribution boxes set during the year is six, all 6-way.

WESTERN UNION TELEGRAPH COMPANY.

This company had a conduit carrying underground cables through South street and across railroad property to the Old Colony Railroad bridge, over Fort Point channel, but owing to changes necessitated by construction of South Union Station this route had to be abandoned.

In place of the above, conduits were laid from corner of Summer and Bedford streets, through Summer street, Summer-street extension and Dorchester-avenue extension to Fort Point channel, and cables drawn into the same connecting with submarine cables sunk in the channel.

The only additional conduit work during the year consisted in laying a single iron pipe from terminal pole on Clarendon street, between St. James avenue and Boston & Providence Railroad, through Clarendon, Newbury and Dartmouth streets to Commonwealth avenue, to provide service for Hotel Brunswick and Hotel Vendome.

CONDUIT CONSTRUCTION.

Street.	From.	To.	No. Ducts.	Type.
Summer	Bedford	Atlantic ave.	*3	Iron.
Summer-st. ext.	Atlantic ave.	Dorchester- ave. ext.	4	"
Dorchester-ave. ext.	Summer st. ext.	Fort Point channel	4	"
Clarendon	St. James ave.	Newbury	1	"
Newbury	Clarendon	Dartmouth	1	"
Dartmouth	Newbury	Common- wealth ave.	1	"

The cables drawn in during the year are rubber and fibre insulated of the following sizes: 4, 7, 60, 80, 85 and 100 conductor. Twelve submarine cables (7 conductor) were sunk in Fort Point channel at Dorchester avenue.

The work of the year comprised:

6,311 feet of conduit.
19,499 feet of duct.
13 manholes built.
8 service connections.
7,371 feet of cable drawn in.

BROOKLINE GAS LIGHT COMPANY.

During the past year this company extended its underground system from No. 74 Bay State road, through Bay State road, Raleigh and Beacon streets to Charlesgate West, and also laid a line of conduit from terminal pole at Commonwealth and Harvard avenues, through Commonwealth avenue to No. 1291.

The cables drawn in these conduits are rubber insulated, size No. 4 and No. 0000, and carry current for arc and incandescent lighting purposes. Five overhead transformers have been installed temporarily in manholes on Bay State road, Raleigh and Beacon streets. They will be replaced later by regular underground transformers.

The work of the year consisted of:

1,680 feet of conduit.
4,550 feet of duct.
9 manholes and 22 4-way boxes.
14 service connections.
6,175 feet of cable drawn in.

* This enlarges old conduit to 4 ducts.

COMBINATION OF SMALL COMPANIES.

This association consists of the following low tension companies :

Boston Automatic Fire Alarm Company.
Boston Electric Protective Association.
Boston District Messenger Company.
Mutual District Messenger Company.
Holmes Electric Protective Company.
Postal Telegraph-Cable Company.
United Telegram Company.
Stock Quotation Telegraph Company.

The Postal Telegraph-Cable Company and Boston Automatic Fire Alarm Company are the only members of this association who laid any main conduit during the year. The only work by the association consisted in making a few building connections and drawing cable into the underground conduits previously constructed.

The cables drawn in are paper, rubber and fibre insulated. They are of the following sizes : 2, 3, 5, 6, 8, 10, 12, 15, 25 and 30 conductor, and 2, 3, 4, 5, 9, 15 and 108 pair.

The amount drawn in by each company is given under the heads of individual companies.

The work of the year comprised :

3 service connections.
319 feet of duct.
1 manhole built.

PARK DEPARTMENT AND PUBLIC GROUNDS DEPARTMENT.

During the year the Park Department set five wooden arc light poles in the North End Park and connected the same with the underground conduit of the Boston Electric Light Company at Commercial street.

The construction through the park consists of 1½-inch iron pipe with 3-way boxes. Until this year the arc lights in the Public Garden have been supplied with current by means of overhead wires.

During the past year the Public Grounds Department replaced the iron poles with seventeen wooden arc light poles, and laid 2-inch and 1½-inch pipe with 3-way boxes through the Public Garden, connecting with the conduit of the Boston Electric Light Company at Charles and Boylston streets.

In order to provide lighting in vicinity of the band-stand in Boston Common, three wooden arc light poles were set at this point and connected under ground by means of 2-inch and 1½-inch iron pipe and 3-way boxes.

The cables drawn into the above conduits are rubber insulated, size No. 6, and current is supplied by the Boston Electric Light Company.

The work of the year comprised :

6,445 feet of duct.
36 three-way boxes.
22 service connections.
8,922 feet of cable drawn in.

BOSTON FIRE DEPARTMENT.

This department opened the following streets for the purpose of laying underground conduits :

Central Wharf, from Atlantic avenue to water front.

Boylston street, from Berkeley to Arlington streets.

Way street, from Harrison avenue to Albany street.

The work in Central Wharf consisted in laying a single cement-lined pipe in same trench with a 12-inch salt water pipe for fire purposes, and the cable drawn into this conduit provides a means of communication between the fire-boat and post hydrants which have been set in the district.

On Boylston street a single iron pipe was laid from conduit of New England Telephone and Telegraph Company at Berkeley street to fire-alarm box at Arlington street.

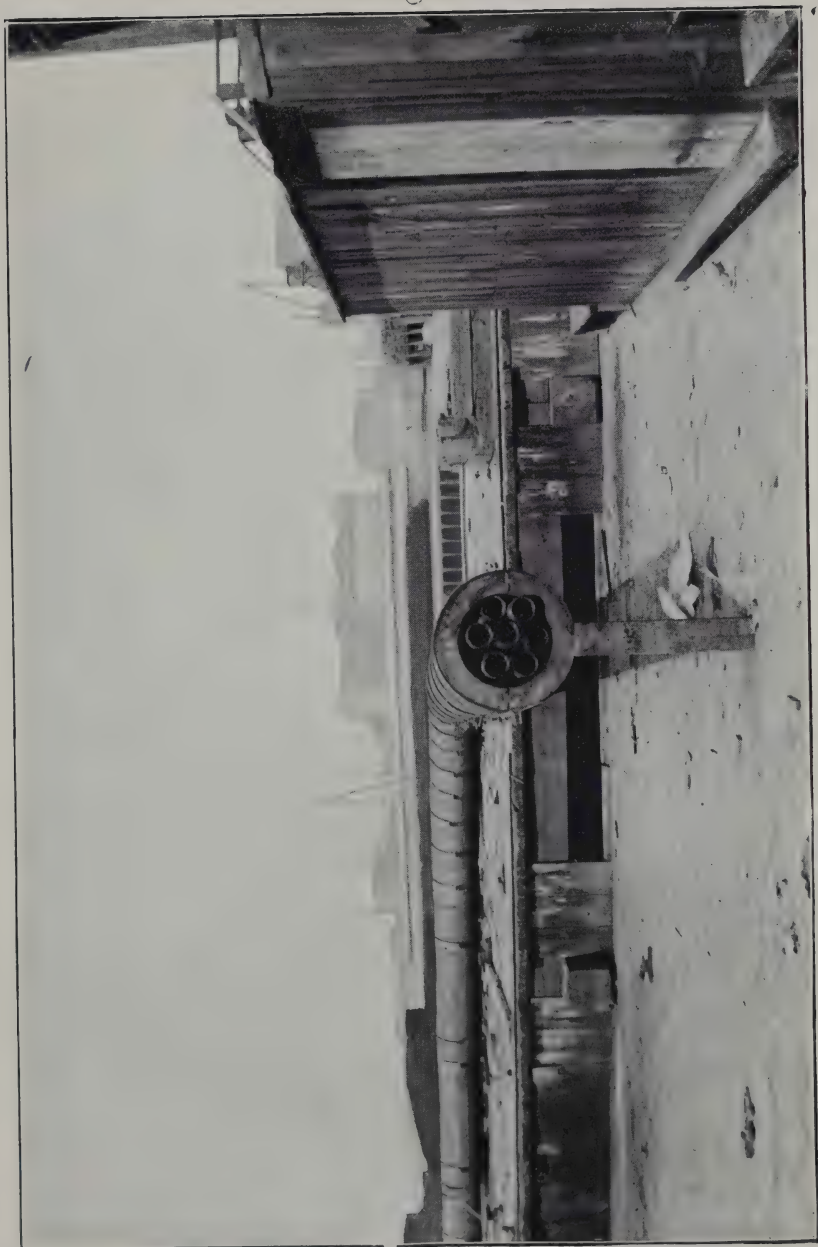
Owing to changes in the street line of Way street, due to railroad construction, the fire-alarm conduit between Harrison avenue and Albany street was abandoned, and a single iron pipe laid through the street in a new location.

In addition to the above, the work of setting new posts, each of which supports a signal box, has been continued, and connections made from the boxes to the underground conduits of the New England Telephone and Telegraph Company.

The cables drawn in during the year are rubber insulated, sizes 5, 7, 10 and 37 conductor.

The work of the year comprised :

7,730 feet of duct.
2 manholes built.
26 service connections.
17,601 feet of cable drawn in.



NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY'S SUB-MARINE CONDUIT.

Plate No. 14.

BOSTON AUXILIARY FIRE ALARM COMPANY.

Five signal boxes of the Boston Auxiliary Fire Alarm Company were connected to the underground system of the Fire Department during the year.

BOSTON POLICE DEPARTMENT.

Like the Fire Department this department also uses the ducts of the New England Telephone and Telegraph Company for its cables wherever possible. During the year nine signal posts were set and connected by means of 2-inch wrought iron pipe to adjacent manholes of the New England Telephone and Telegraph Company, so that this work did not require the laying of any main conduit. Three of these posts are located in Division 15, Charlestown, and are now connected with that station by means of the underground conduits of the New England Telephone and Telegraph Company.

The cables drawn in are rubber insulated, size 7 conductor.

The work of the year comprised :

1,132 feet of conduit.
12 service connections.
1,620 feet of duct.
10,000 feet of cable drawn in.

POSTAL TELEGRAPH-CABLE COMPANY.

This company extended its underground system from Beverly street through Travers to Canal, thence through Canal to its office at No. 132 of said street, two wrought iron pipes being laid in each street.

The only additional underground work consisted of making a few service connections and the drawing in of underground cables into these conduits, and those owned by the combination of small companies, of which it is a member. The cables drawn in are fibre, rubber and paper insulated.

The work of the year comprised :

568 feet of duct.
3 manholes built.
2 service connections made.
600 feet of cable drawn in.

BOSTON AUTOMATIC FIRE ALARM COMPANY.

The underground work of this company during the year consisted in laying a single wrought-iron pipe from manhole of the Postal Telegraph-Cable Company at Canal and Travers streets, through Travers to Portland street, and in making service connections from this conduit and that of the Postal Telegraph-Cable Company on Beverly and Charlestown streets. Rubber insulated cables were drawn into these conduits and those of the combination of small companies, of which it is a member.

The work of the year consisted of:

- 1,233 feet of duct.
- 6 service connections.
- 2,536 feet of cable drawn in.

CHURCH GREEN ELECTRIC LIGHT AND POWER COMPANY.

This company laid a single iron pipe in Columbia street, from Bedford street to No. 12, and made two building connections from its underground system. The cables drawn in are rubber insulated, sizes No. 6 and No. 4.

The work of the year comprised:

- 141 feet of conduit.
- 227 feet of duct.
- 1 handhole built.
- 2 service connections.
- 1,076 feet of cable drawn in.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

In connection with the installation of a private lighting plant in the technology building, off Trinity place, this corporation laid underground conduits of wrought iron pipe between the dynamo building and the several technology buildings. The cables drawn into these conduits are lead-covered and rubber insulated, sizes No. 00 and No. 0000.

The work comprised:

- 416 feet of duct.
- 2 manholes.
- 4 service connections.
- 2,285 feet of cable.

WALKER BUILDING PLANT.

This plant is located in the basement of the Walker building on Boylston street, at Boylston place, and its



THE SAME CONDUIT (represented in Plate No. 14) READY TO BE SUNK IN THE CHANNEL.

customers are in adjacent buildings. During the past year this company engaged in underground work in Boylston place and Van Rensselaer place, so as to supply customers with underground service.

Both cement lined and wrought iron pipe were used in the construction work. The cables drawn in are rubber insulated, sizes No. 4 and No. 0000.

The work comprised :

180 feet of conduit.
476 feet of duct.
3 manholes.
7 service connections.
942 feet of cable drawn in

MASSACHUSETTS HOMCEOPATHIC HOSPITAL.

The work during the year consisted in extending conduits laid last year through the hospital yard and drawing in additional underground cables. The cables are rubber insulated, size No. 0000.

The work comprised :

260 feet of conduit.
514 feet of duct.
1 manhole.
1,072 feet of cable.

BOSTON DISTRICT MESSENGER COMPANY.

This company is a member of the combination of small companies, and during the past year drew 9,505 feet of fibre and paper insulated cable into the ducts of this association reserved for its use.

MISSION CHURCH (ROXBURY).

A private plant was installed here during the year, and connections made from dynamo building to the church and school buildings to carry cables supplying current for incandescent lighting purposes. Wrought iron pipe is used in the construction. No cable has been drawn into these conduits as yet, and the underground work is not complete.

The work comprised :

256 feet of duct.
3 handholes.
3 service connections.

HOLMES ELECTRIC PROTECTIVE COMPANY.

The only underground work of this company consisted in drawing 4,636 feet of rubber insulated cable into the conduit owned by the combination of small companies of which it is a member.

BOSTON ELECTRIC PROTECTIVE ASSOCIATION.

This company drew 1,850 feet of rubber insulated cable into the ducts reserved for its use in the conduits of the combination of small companies.

MUTUAL DISTRICT MESSENGER COMPANY.

During the year this company drew 1,697 feet of rubber insulated cable into the conduits of the combination of small companies.

MIXER BROTHERS.

This firm drew 686 feet of paper insulated cable into the ducts owned by the combination of small companies.

STOCK QUOTATION TELEGRAPH COMPANY.

This company is a member of the combination of small companies, and during the year drew 250 feet of rubber insulated cable into the ducts of this association.

SUMMARY OF WORK OF 1898.

COMPANIES.	Feet of Conduit.	Feet of Duct.	Feet of Cable.	Number of Con- nec- tions.	Number of Man- holes.
Boston Electric Light Co.....	49,087	471,851	805,799	473	294
New England Tel. and Tel. Co.	37,776	216,374	191,761	106	152
Boston Elevated Railway Co.....	13,463	89,473	95,633	20	66
* Edison Electric Illuminating Co...	2,224	13,629	32,924	239	6
Western Union Telegraph Co.	6,311	19,499	7,371	8	13
Brookline Gas Light Co.	1,680	4,550	6,175	14	** 9
Park Dept. and Public Grounds.....		6,445	8,922	22	†
Boston Fire Department.....		7,730	17,601	26	2
Boston Police Signal Service... ..	1,132	1,620	10,000	12	.....
Boston Automatic Fire Alarm Co....		1,233	2,536	6	.....
Postal Telegraph-Cable Co.		568	600	2	3
Mass. Institute of Technology		416	2,285	4	2
Combination of small companies ...		319	†	3	1
Mass. Homœopathic Hospital.....	260	514	1,072	.....	1
Walker Building Plant	180	476	942	7	3
Mission Church		256	.....	3	3
Church Green Electric L. & P. Co...	141	227	1,076	2	1
Boston District Messenger Co.....			9,505	.....	.....
Holmes Electric Protective Co.....			4,636	.....	.....
Mutual District Messenger Co.....			1,697	.....	.....
United Telegram Co.....			1,443	.....	.....
Mixer Brothers.....			686	.....	.....
Stock Quotation Telegraph Co.			250	.....	.....
Totals.....	112,254	835,180	1,202,914	947	556

* Also 13,463 feet of 3-wire solid tube, with 6 distribution boxes.

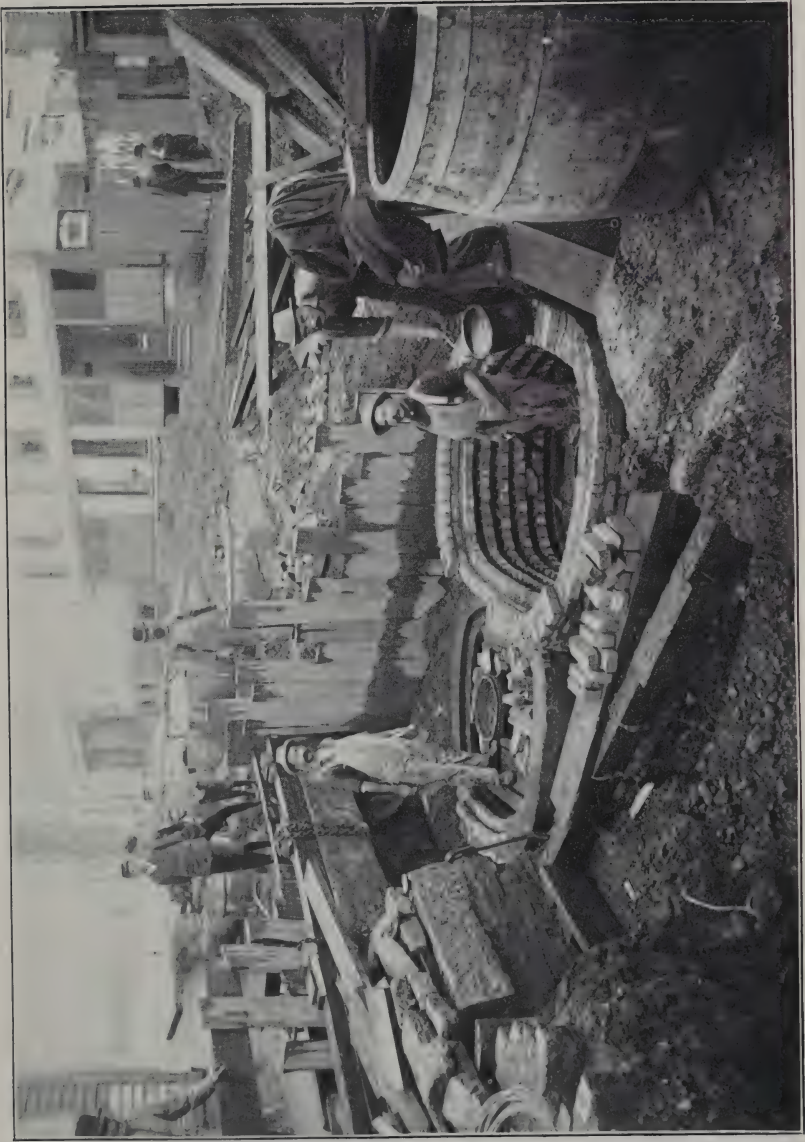
** Also 22 four-way boxes.

† Thirty-six three-way boxes.

† See individual companies.

Table showing Underground Electrical Service of Boston.

NAMES OF COMPANIES.	Feet of Conduit.	Feet of Duct.	LENGTH OF CABLE IN FEET.				Feet of Single Conductor in Cables.	No. of Service Connections.	No. of Man-holes.
			For Light and Power.	For Telephone and Telegraph.	For Signalling and Miscellaneous.	Total.			
New England Telephone and Telegraph.....	310,400	2,002,000	.....	889,550	.....	889,550	151,853,000	912	1,385
Boston Electric Light.....	220,740	1,164,613	2,573,023	10,243	.....	2,583,266	2,583,266	1,587	1,254
Boston Elevated Railway.....	57,472	628,817	1,056,986	11,724	4,060	1,073,624	1,178,470	72	248
Edison Electric Illuminating.....	23,901	214,611	214,611	.....	.....	214,611	1,073,055	3,670	93
Western Union Telegraph.....	35,755	164,735	.....	59,419	.....	59,419	3,330,027	58	115
Park Department and Public Grounds.....	24,248	102,683	125,031	.....	.....	125,031	125,031	328	73
Combination of Small Companies.....	13,472	72,822	.....	.....	.....	*	.....	110	89
Postal Telegraph-Cable.....	12,903	25,292	.....	26,040	.....	26,040	942,086	30	80
Brookline Gas Light.....	6,028	18,264	9,823	.....	.....	9,823	3,823	37	115
American Telephone and Telegraph.....	.....	13,036	.....	13,036	.....	13,036	932,624	2	.....
Boston Police Signal Service.....	8,691	9,179	.....	.....	145,503	† 145,503	982,851	146	16
Boston Fire Department.....	.....	12,641	.....	.....	124,726	† 124,726	3,764,263	157	33
Suburban Electric Light and Power.....	.....	.....	15,812	.....	.....	† 15,812	15,812	.....	12
Church Green Electric Light and Power.....	3,754	4,958	16,416	.....	.....	16,416	16,416	24	24
Boston District Messenger.....	.....	4,365	.....	.....	16,463	16,463	181,470	1	2
Mutual District Messenger.....	.....	.....	.....	.....	12,416	12,416	154,975	.....	.....
Boston Automatic Fire Alarm.....	.....	1,233	.....	.....	28,771	28,771	514,928	112	.....



CONSTRUCTION OF A TWIN MAN-HOLE.

Plate No. 16.

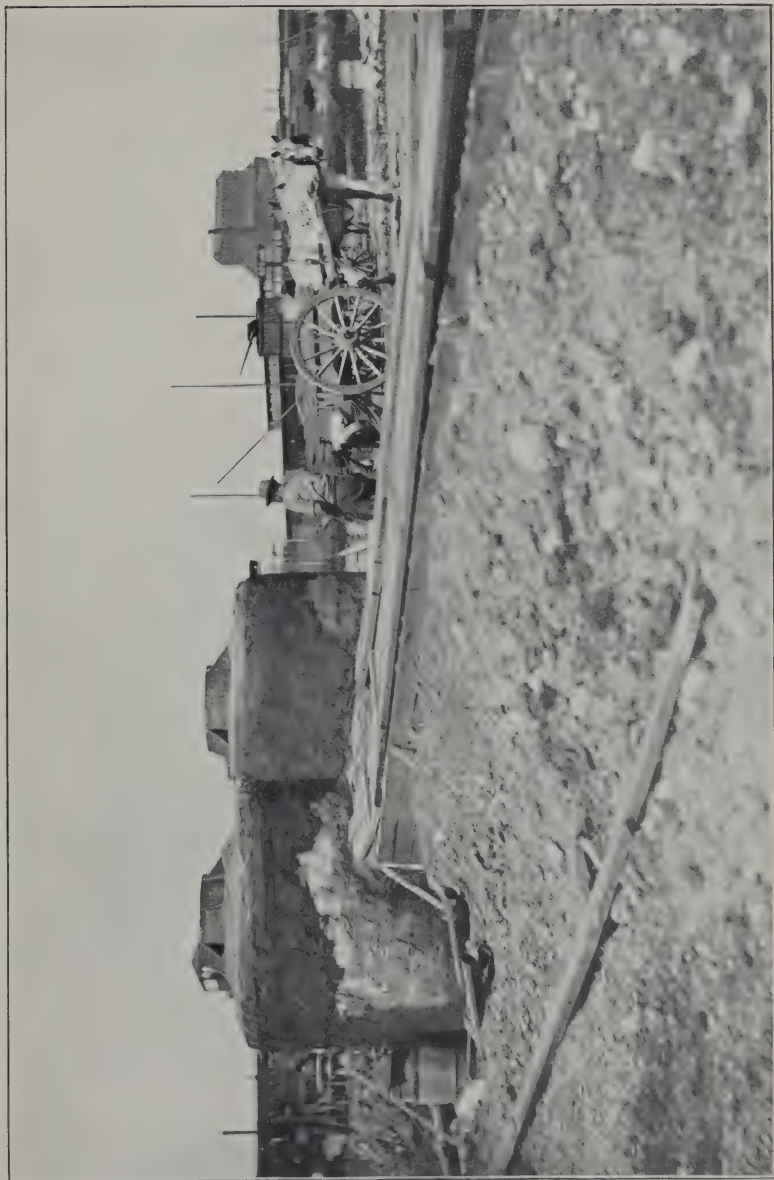
Holmes Electric Protective.....					12,959			
United Telegram		1,359			6,519			
Stock Quotation.....					950			
Boston & Albany Railroad.....	175	725	880		1,310	1,360	3	
Boston & Maine Railroad		700	700		700	1,400	2	
Public Institutions and Hospital Department.....	3,172	11,442	10,399		10,399	10,399	17	3
Boston Water Department.....	2,670	2,690			2,690	2,690	1	
Massachusetts Homeopathic Hospital.....	770	1,534	2,092			2,092	2	3
United States Sub-Treasury		1,403	4,300			5,710	1	5
Quincy Market Cold Storage.....	1,854	7,008	15,154		2,526	40,414	4	4
Massachusetts Institute of Technology.....		416	2,285			2,285	3	3
Winch Brothers.....		317	317			634	2	
Mission Church.....		256					3	3
C. A. and J. G. Damon.....	194	388	630	210		1,890	1	
Walker Building Plant.....	180	476	942			942	7	3
D. Webster King.....	160	240	320			320	2	
Mixer Brothers.....								
Miscellaneous.....	458	608	3,215	143	5,314	5,314		
						3,560	19	
Totals	726,997	3,469,011	4,052,186	1,010,365	363,377	5,427,482	7,313	4,563

The Edison tubes are not enumerated as ducts, nor the conductors therein as cables.
 The amount of Edison tube is 395,909 feet — Main, 288,693. Feeder, 127,306.
 The amount of single conductors therein, 1,442,339 feet.
 Number of distribution boxes in solid system, 374.

* See individual companies.
 † Principally in the ducts of other companies.
 ‡ In the ducts of the Boston Electric Light Company.

Table showing the Amount and Distribution of Boston's Electrical Power, February 1, 1899.

COMPANIES.	Total rated Horse Power of Boilers.	Total rated Horse Power of Engines.	Capacity in Incandescent Lamps.	Capacity in Arc Lamps.	Number of Motors.	Horse Power of Motors.	Number of Stations.
Boston Elevated Railway Company	20,770	34,500	27,700	195	3,447	68,940	7
Boston Electric Light Company	14,890	19,142	66,000	8,000	1,189	3,419	7
Edison Electric Illuminating Company	50,709	8,085	176,430	1,750	1,901	7,026	5
Suburban Light and Power Company	895	1,150	9,650	495	140	614	2
Charlestown Gas and Electric Light Company	770	685	7,400	8	48	270	5
Brookline Gas Light Company	1,450	2,400	16,000	680	24	195	1
Church Green Electric Light and Power Company,	625	525	6,000	510	11	43	1
Isolated Plants			112,963	1,456	301	3,405	195
Block Plant Company	273	287	2,300	.....	9	30	1
Totals	90,382	66,774	424,443	13,094	7,070	84,002	224



TWIN MAN-HOLE AND CONDUIT BUILT BEFORE THE STREET WAS CONSTRUCTED.

Photographs have been taken as heretofore of some of the most interesting portions of the work of the department, showing the conditions of electrical construction both overhead, under ground and in the interior of buildings.

Plate No. 1 shows a fixture for the support of wires and a bank of seven transformers, together with the primary and secondary wires leading to and from the same. This entire outfit has been removed and the necessary transformers placed under ground.

Plate No. 2 shows the condition and appearance of this same roof after the above-named structure and the other appliances had been removed.

Plate No. 3 shows a portion of the ruins of the Fitchburg Railroad elevator in Charlestown during the progress of the fire which destroyed it on the night of April 17, 1898. Many of the wires on the line of poles shown here were broken by the falling timbers and walls; the heat was so intense that those that were not broken could not be removed until some time after the walls had fallen and the fire somewhat cooled down. On this line of poles were the wires of several of the circuits of the Boston Fire Alarm Department; fortunately, however, they were not injured until after the necessary alarms had been given for this fire. The picture shows the repairs being made on these circuits; it also shows a mass of broken wires hanging to the ground.

Plate No. 4 shows the interior of a telephone cable distribution box that was located on the roof of the Houghton & Dutton building. The insulation on the wires, the supports for the terminal connections and the box itself were badly burned by a fire occurring therein, due to an excessive flow of current, caused by a contact between one of the overhead wires leading from or to this box coming in contact with some high potential wire at some unknown point.

Plate No. 5 is a front view of an illuminated sign which was located in one of the largest dry goods establishments in Boston. It was of a type that furnished an intermittent light, each letter being illuminated successively, and then all extinguished, the same operation to be repeated as long as desirable; this end being accomplished by means of a commutator operated by a small electric motor, which was left in operation, through the neglect of some one, after the store had closed. In the meantime one of the carbon brushes on the motor was worn off so short that it failed to make contact with the commutator, causing the motor to stop when the lights were all burning within the wooden receptacles; they were soon ignited by the heat radiating from

the lamps. This apparatus was improperly constructed, and was installed without the knowledge or consent of this department.

Plate No. 6 is a rear view of this same apparatus, showing the motor, commutator and the wires leading therefrom; both of these pictures were taken after the fire.

Plate No. 7 shows the effect of dampness on electrical connections. This accumulation of metallic salt was found in an ice-chest in Faneuil Hall Market.

Plate No. 8 shows a hole burned through a wooden partition by the heat from a 16 candle-power incandescent lamp left hanging against it for several hours; this occurred in a clothes closet.

Plate No. 9 shows a double-pole jack-knife switch with the body of a dead rat lying across the poles thereof. In attempting to crawl between the blades he connected the two opposite poles of the circuit, diverting enough current through his body to electrocute him.

Plate No. 10 shows the form of construction of a twenty-four duct conduit at the Congress-street bridge in which are placed a portion of the conductors for the distribution of current from the new generating station of the Boston Electric Light Company, situated in South Boston.

Plate No. 11 shows the method of laying a twenty-four duct conduit in Congress street, South Boston; this conduit is also owned by the Boston Electric Light Company.

Plate No. 12 shows the method of construction of two submarine conduits sunk, one in the reserve channel at the L-street bridge, and one in Fort Point channel at the Congress-street bridge. These will contain the cables leading from the new generating station built by the Boston Electric Light Company at L and East First streets, South Boston.

Plate No. 13 shows the method of floating one of the above-named submarine conduits between two scows to its destination at the draw of the Congress-street bridge, where it is located on the bottom of the channel.

Plate No. 14 gives a view of another form of submarine conduit constructed by the New England Telephone and Telegraph Company for the protection of their cables crossing the Charles river at the draw of the Warren bridge. It consists of seven wrought iron pipes enclosed in a wooden U-shaped tube.

Plate No. 15 shows the method of placing this conduit in position.

Plate No. 16 shows the method of constructing a double brick manhole in the conduit system of the Boston Electric



ANOTHER VIEW OF TWIN MAN-HOLES.

Plate No. 18.

Light Company at the corner of Second and Dorchester streets, South Boston.

Plate No. 17 shows a completed double brick manhole built in Fargo street, South Boston, before it was built up to grade. These manholes are a part of the Boston Electric Company's system of underground conduits. The new generating station in the course of construction can be seen in the back ground to the left of the manholes.

Plate No. 18 is another view of brick manholes and conduit in Fargo street, built before the street was brought up to the grade line.

STATEMENT OF DEPARTMENT APPROPRIATION
AND EXPENDITURES, FROM FEBRUARY 1, 1898,
TO JANUARY 31, 1899.

Amount of appropriation	\$58,422 83	
Unexpended balance from 1897-98 ap- propriation	12	
		\$58,422 95

Amount of expenditures :

Salaries :

Commissioner	\$5,000 00	
Employees	47,254 51	
		\$52,254 51
Horse-keeping, shoeing, hire, etc.	1,542 30	
Travelling expenses	900 60	
Stationery	900 16	
Public Buildings Department, Re- pairs Division, labor and stock	702 27	
Printing	576 66	
Telephone service	382 44	
Public Buildings Department, Elec- trical Division, labor and stock	376 79	
Instruments, tools, etc.	311 47	
Refreshments for employees, extra service	279 24	
Advertising	90 51	
Police and fire notification	50 00	
Teaming	39 50	
Office expenses	16 50	
		<u>\$58,422 95</u>

THOMAS W. FLOOD,
Commissioner of Wires.

LIST OF PROPERTY OF THE WIRE DEPARTMENT.

-
- 1 Test Board, Capacity 220 volts and 300 amperes.
 - 1 Auxiliary Test Board, capacity 220 volts and 150 amperes.
 - 1 Auxiliary Test Board, capacity 220 volts and 75 amperes.
 - 1 Weston Direct Reading Voltmeter, No. 3,317, 300 volts.
 - 1 Weston Direct Reading Voltmeter, No. 4,747, 15 volts.
 - 1 Weston Direct Reading Ammeter, No. 926, 150 amperes.
 - 1 Weston Direct Reading Voltmeter, No. 3,438, 1,500 volts.
 - 1 Weston Direct Reading Mil-Ammeter, No. 2,433, 1,500 milammeter.
 - 1 Weston Direct Reading Voltmeter, No. 6,020, 300 volts.
 - 1 Weston Direct Reading Ammeter, No. 2,428, 500 amperes.
 - 1 Standard Portable Alternating and Direct Current Voltmeter, No. 1,044, 300 volts.
 - 1 Reflecting Galvanometer, Condenser, Telescope, Scales, etc.
 - 2 Bichloride of Silver Batteries, 150-cell and 60-cell.
 - 1 Queen testing set, No. 389.
 - 1 Weston Direct Reading Ammeter, No. 2,381, 50 amperes.
 - 1 Set Standard Resistance Coils.
 - 1 Generator, 50,000 ohms.
 - 1 Discharge Key.
 - 1 Reversing Key.
 - 1 Lamp-stand and Scale.
 - 1 Shunt Coil.
 - 1 Set Double Connector Posts.
 - 3 Horses
 - 2 Express Wagons.
 - 1 Business Wagon.
 - 1 Buggy.
 - 1 Sleigh.
 - 4 Sets of Harness.
 - 3 Robes.
 - 10 Blankets.

Miscellaneous tools used in connection with overhead construction.

Draughting instruments.

There are on file in this office plans showing pole locations in the city of Boston; also plans of the electrical subways.

The photographic apparatus consists of two cameras, one wide-angle lens, developing, printing and toning outfits complete. In connection with the same there is a valuable collection of photographs, showing streets before and after being cleared of poles and wires; also views of crowded fixtures, fires, accidents, etc.

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